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DECAY OF INDIAN INDUSTRIES

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FOREWORD
BY
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SECRETARY,
ALL INDIA VILLAGE INDUSTRIES ASSOCIATION



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TO
MY MOTHER

FOREWORD

People the world over stand aghast at the results brought about by the much admired economic organisation of the West. Palaces and hovels, glut and need, gormandising and starvation all exist side by side while un-employment like fell epidemic sweeps the industrial cities of the West, and at the same time a Marathon race in armaments is absorbing the attention of the nations. Are these not sufficient symptoms of ill health? Need we not set about finding ways and means of restoring humanity to full health and strength?

Western Europe has been enslaved by a financial capitalism while America is being devoured by her labour-saving devices and Russia is enthusiastically rationalising capitalism and is binding herself hand and foot in attempting to find a way out of Western economic morass.

In this booklet Sjt. P. R. Ramachandra Rao feels the pulse of the dying industries of India and comes to the only possible conclusion that any thoughtful student of Economics who steers clear of propagandistic literature can come to, i. e., the salvation of India economically lies in the revival of village industries. This means that production has to be decentralised which will distribute the fruits of labour among the workers and do away with the need for the bayonet to force markets to consume the dumped articles. The author has grasped the causes of the economic ailment and his remedy is rightly directed towards opening up channels as outlets for the energy and talents of all villagers and thereby reducing dire need and poverty.

Maganvadi,

Wardha

11th April 1935.

J. C. KUMARAPPA.

PREFACE

TO-DAY India stands on the top of golden hours. From the crest of the national wave opens out a splendid expanse of immense possibilities. We look back at the twilight glow of our national past and are overwhelmed. The feeling soul yearns for the vivid tints of that glorious achievement to colour a future India. The youthful vision of the India to-be is an India re-born, with a splendour fetched from our storied past.

We, who are the builders of a New India, need to build on stable foundations. Our industrial reconstruction must take stock of our industrial achievement and avoid the pitfalls of our industrial decadence. That is the justification for my monograph. I have had in my inquiry illustrious predecessors like Romesh Chunder Dutt and Major Basu. My debt to them is immense.

In whatever I have written, I have spoken truly and frankly, setting the facts in their

proper perspective. Where an issue was controversial I have generally let my authorities speak for themselves.

I am grateful to Sri J. C. Kumarappa for writing the Foreword to my monograph and for allowing me to append a note on the All India Village Industries Association.

Masulipatam,

April 1935.

P. R. Ramachandra Rao.

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DECAY OF INDIAN INDUSTRIES

INTRODUCTION

MY purpose in this monograph is to set forth the contributory causes that made towards the decay of Indian industries. This work is inspired by no mere dilettantism nor is it my desire to perform a thanksgiving to our industrial past. Very often, indeed, our industrial chronicles have degenerated into purposeless hyperbole, grossly shifting the emphasis of industrial studies. The past certainly is alive with a most persistent vitality, it but needs the stimulus to flower. Our heritage is valid only if it serves as the bed-rock whereon to raise the superstructure of our industrial future.

If the chroniclers of our industrial prosperity have erred on the side of hyperbole the apologists of our industrial decay have denied us that glorious heritage dismissing it as a myth of no consequence soever. India has been and must be a pre-eminently agricultural country is the oft-repeated apologist slogan. This gross misrepresentation has not passed

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without refutation and the most emphatic protest calculated to enlighten the public mind was made by Pandit Madan Mohan Malaviya in his spirited Minute of Dissent to the Report of the Industrial Commission. But almost a century ago the position of India was stated in unequivocal language by a great and feeling Englishman. Montgomery Martin said: 'I do not agree that India is an agricultural country; India is as much a manufacturing country as an agricultural; and he who would seek to reduce her to the position of an agricultural country seeks to lower her in the scale of civilisation.' Those were noble words nobly spoken and are a lasting corrective to historical astigmatism.

I will not anticipate what the following pages will only too clearly set forth—any account of our industrial excellence. Here is a chorus of appreciations:—'At a time when the west of Europe, the birth-place of the modern industrial system, was inhabited by uncivilized tribes, India was famous for the wealth of her rulers and for the high artistic skill of her craftsmen. And even at a much later period, when the merchant adventurers from the west made their first appearance in India, the industrial development of this country was, at any rate, not inferior to that of the

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more advanced European nations'.¹ Says Thornton: 'Ere the pyramids looked down upon the valley of the Nile, when Greece and Italy, those cradles of European civilization, nursed only the tenants of the wilderness, India was the seat of wealth and grandeur. A busy population had covered the land with the marks of industry; rich crops of the most coveted productions of nature annually rewarded the toil of the husbandman. Skilled artisans converted the rude products of the soil into fabrics of unrivalled delicacy and beauty. Architects and sculptors joined in constructing works, the solidity of which has not, in some instances, been overcome by the evolution of thousands of years.'² Professor Weber wrote: 'The skill of the Indians in the production of delicate woven fabrics, in the mixing of colours, the working of metals and precious stones and in all manner of technical arts has from very early times enjoyed a world-wide celebrity.'

My concern, however, is solely with the decadence of our industries, but any account of our industrial decline should be lacking in point and significance if not prefaced by a retrospective sketch of our industrial glory.

¹ Industrial Commission Report.

² Major B. D. Basu.

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The earlier part of my work will, therefore, trace the historical background of our industry and I have endeavoured to present both a cumulative and a several view of our industrial past. I have done this by a two-fold approach: firstly, by adhering to the chronological sequence of our industrial narrative and secondly, by taking up one industry after another. The historical background is not meant to be exhaustive or complete; my aim has been to sketch the merest outline as any attempt to deal with this aspect of the subject *in extenso* would simply result in the introduction of technical detail and throw the contents entirely out of focus. The interchapter that follows marks the transition to our industrial decline, as I certainly believe that the decay of our arts and crafts is owing in considerable measure to the indifference to artistic manufactures developed during the later day of the Moghul epoch much earlier than the advent of foreign trading companies or the abolition of native courts. The industrial decay itself is taken up by the succeeding chapter and I have endeavoured to set the factors contributing to decay in their proper perspective, seeking to establish their resultant operation rather than the predominant effects of a single factor or set of factors. The 'Aftermath' brings the

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subject nearer our own times marking the farthest limit, if any limit can be assigned, to the operation of long-drawn factors. The logical conclusion of my work is reached with the termination of this chapter but I have preferred to round off my inquiry by appending a modest 'Prospect'. I have said that our industrial past should serve as the basis of our industrial reconstruction and the content of this chapter is treated in this light. I have called into question the entire trend of modern Indian industry for its iniquitous divorce from the crying needs of our starving millions. The future of Indian industrialism, I have attempted to establish, must be broad-based on a national revival of basic industries and traditional crafts.

HISTORICAL BACKGROUND

I

THE History of Indian Commerce dates far back into the recesses of time before Christ. The bulk of our traffic lay with the Occident: from the earliest times articles of commerce traversed the three trade-routes which linked India with the west. The first, and probably the earliest, crossed the lofty passes of the Hindukush and reached the Caspian by way of the Oxus or stretched along the Caravan road which fringes the Karmanian desert to Antioch. But the way was long and perilous, the commerce fitful and uncertain. The second ran from the mouth of the Indus across the Persian Gulf to the Euphrates and from thence to Antioch or to the ports of the Levant. This trade was of great antiquity and has been traced to the cuneiform inscriptions of the Hittite kings of the fourteenth century B. C.¹ It is quite probable, as has been claimed, that the word 'Sindhu' discovered

¹ H. G. Rawlinson

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in the library of Assurbanipal (660 B. C.) was used to denote Indian cotton. But it is certain that maritime traffic flourished between India and Babylon in the seventh century B. C.: the history of Chinese coinage, the Indian elephants on the obelisk of Shalmeneser III (860 B. C.), the Baveru Jataka which mentions Indian merchants voyaging to Baveru (Babylon)—all go to establish the antiquity of Indo-Babylonian maritime commerce. In the bustling markets of Babylon was a concourse of diverse merchant races; traders from the Punjab, Ionian merchants and Phoenician tradesmen. On the coastline of India, Tamralipti in the East and Broach and Supara in the West were the principal ports of merchandise. The Dravidians had the larger share of it: articles of commerce, rice, ginger and cinnamon, bearing their Tamil names crossed over to the West from time to time. Among the wide variety of Indian exports are mentioned cotton-fabrics and ivory.

The third, and the most important of the trade-routes, however, wound its way along the Persian and Arabian coasts to the ancient emporium of Aden, then across the Red Sea to Suez to branch off into Egypt and Tyre.

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From immemorial times Indian goods poured into Aden, and, through Judaea by way of Tyre and Sidon, reached the Mediterranean. But the traffic by this route was inconsiderable till the first century of the Christian era, when in the reign of Claudius, a captain of the name of Hippalus (47 A. D.) discovered the possibility of using the regular Etesian winds which blew across the Indian ocean. Our maritime commerce received an enormous impetus thereby and in the first and second centuries A. D. Southern India had established an extensive trade with the Roman Empire.

II

Herodotus (b. 484 B. C.), the earliest of Greek writers on India, mentions among others 'the excellent wild-cotton, superior to sheep's wool, of which the Indians made their clothes.' Megasthenes writes: 'they (Indians) love finery and ornament. Their robes are worked in gold, and ornamented with precious stones, and they wear also flowered garments made of the finest muslin.' In the markets of Pataliputra, Gangetic muslins vied with silk from the Seres. The first Municipal Board of the imperial city was entrusted with the

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superintendence of everything relating to the industrial arts. The efficiency of a craftsman was held in such esteem that capital punishment was inflicted on any person who disabled an artisan. The Greek ambassador notices that the Hindus used paper woven from flax. Strabo mentions Indian garments embroidered and interwoven with gold.

Of Menander's (155 B. C.) capital city of Sagala (Sialkot) the 'Milinda Panha' gives a fascinating account: 'There is in the country of the Yonakas a great centre of trade, a city that is called Sagala. Well displayed are the innumerable sorts of costly merchandise with which its shops are filled.....shops are there for the sale of Benares Muslin, of Kotumbara stuffs, and of other cloths of various kinds;..... Jewels are there in plenty such as men's hearts desire, and guilds of traders in all sorts of finery display their goods in the bazaars that face all quarters of the sky. So full is the city of money, and of gold and silverware, of copper and stone ware that it is a very mine of dazzling treasures.'¹

Imperial Rome demanded on an unprecedented scale Indian muslins of the finest

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quality. The Roman trade in Indian luxuries reached its zenith in the reign of Nero causing an enormous drain upon Roman finance. Pliny (79 A. D.) complains : '..... in no one year does India drain our empire of less than 550 millions of sesterces¹ giving back her own wares in exchange, which are sold among us at fully one hundred times their cost price.' Roman coins, which were the principal medium of international commerce, flowed out in exchange for Indian finery. This largely accounts for the discovery in South India of innumerable gold coins of the Roman emperors and warrants the opinion that colonies of Roman traders eventually sprang up in the presidency of Madras.

The author of the anonymous pamphlet, 'Periplus of the Erythræan Sea'(80 A.D.), gives a fascinating description of his coasting voyage to India from the writer's personal experience. At the ancient port of Barygaza, modern Broach, on the banks of the Narmada was an immense export trade, muslins among others. Vessels from the Red Sea put in about July on the advent of the south-west monsoon, harboured in the calmer basins of the Narmada and lay waiting for the north-east winds of December for the voyage back to the Red

¹ Eighty lakhs of Rupees.

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Sea. On the South Indian west coast were Muziris (modern Cranganore) and Nelkynda, famed harbours both. From Nelkynda in the backwaters of Cochin a huge traffic was put to sea—the ivory and silk from Bengal, and muslins besides beryls, pearls and diamonds. The momentous discovery of Hippalus in the first century of the Christian era entirely transformed the sea-borne trade of Nelkynda: ere long it had completely out-rivalled the ancient port of Broach. At the ports of Kamara, Pondicherry and ‘Supatna’ on the Coromandel (Cholamandalam) there was an extensive trade in pearls and muslins; sea-faring Catamarans plied to meet the in-coming vessels from Bengal. Further north, Masalia (Masulipatam) was famed for its historic trade in muslins and chintzes; and Tamralipti at the estuary of the Ganges trafficked in the muslins of Benares. In the long list of Indian exports the ‘Periplus’ records besides, perfumes, pigments, animal skins, indigo and porcelain.

III

The Indo-Aryans of the Rig Vedic period were remarkably advanced in the mechanical arts and considerably familiar with the processes of weaving, tanning and metallurgy. Weaving,

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both in cotton and wool, stood foremost among industrial occupations and it is remarkable that then as afterwards both men and women were engaged in it. In the Rig Veda, Night and Dawn are compared to two female weavers. The industrial structure of Indo-Aryan society was well-ordered: the carpenter, the blacksmith, the goldsmith and the tanner worked in a corporate partnership. The carpenter was a miscellaneous craftsman: he was house-constructor, chariot-maker, cartwright and shipwright in one. He was wood-carver to boot and excelled in producing fine artistic cups. The blacksmith was likewise versatile: from the fine needles and razors to the scythes and ploughshares and the spears and swords, he could make all.¹ The tanner was in requisition for a variety of articles ranging from the bow-strings to the liquor-holding casques.

Early Indian literature has numerous references to industrial and commercial corporations. Vedic society was sufficiently evolved for an extensive differentiation of economic functions. Professor Radhakumud Mookerjee justly remarks: 'Guild-life in fact belongs to a considerably advanced stage of economic progress.' The Vedic texts, the

¹ R. C. Majumdar.

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'Aitareya Brahmana', the 'Chandogya Upanishad' and the 'Brihad Upanishad' point to the existence of the 'Sreni' or the industrial corporation, with the 'Sreshtin' or 'Sraishtya' for headman of the guild. Every autonomous industrial corporation had its own constitution and regulations recognised by law. The absolute rigidity of castes for ever determining crafts is the grotesque invention of later times: in the earliest times, indeed, there was free mobility of labour, vertical and horizontal.

In 327 B. C. Alexander of Macedon broke in upon the long peace of India. Among the presents offered by the envoys of the Malavas to the victorious Alexander were a great quantity of cotton cloth and a hundred talents of 'white iron', probably steel. Kautilya testifies to the high degree of material civilization achieved by Indians in the fourth century B. C. and to the enormous commerce both inland and foreign. The 'Arthasastra' mentions the famed cotton-fabrics of Benares, besides those from Madura, the Konkan, Kalinga, Vanga, Vatsa and Mahishmati. From the North came blankets and skins. The expanding luxury of the Mauryan epoch fostered

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a splendid craftsmanship in all the manual arts. The arts of the jeweller and the lapidary as also the art of glass-making 'had reached a high pitch of excellence long before the third century B. C.' In the literature of the times we read of chairs of every description, armed, cushioned, cane-bottomed and straw-bottomed; slippers of every colour from blue to red; shoes adorned with the skins of the lion, the tiger, the panther, the antelope, the cat, the squirrel and the owl, or sewn round with peacock-feathers or bedecked with pearl and beryl.¹ The list is not exhaustive. Kautilya records that there was a special department of the Central government consisting of three 'amatyas' (ministers) for the protection of artisan interests. The craft-guilds of the Mauryan age attained to an extraordinary level of pre-eminence: they had their own courts for the maintenance of internal discipline, and subserved as local banks for money deposits.

The famous Iron Pillar at Delhi, of wrought iron, belonging to the age of Samudragupta (fourth century A. D.) is a lasting monument to the metallurgical skill of the times. Ranade remarks: '.....(it) has been the marvel of all who have endeavoured to

1 R. C. Majumdar

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account for it. Mr. Ball (late of the Geological Survey of India) admits that it is not many years since the production of such a pillar would have been an impossibility in the largest factories in the world.' Huien Tsang (630 A. D.) mentions that the emperor Harshavardhana offered to the image of the Buddha at Prayag thousands of silken robes embroidered with gems. Of Surashtra, the Master of the Law notices: 'the men all derive their livelihood from the sea and engage in commerce and exchange of commodities.'

The shadows of the Mahomedan invasions were drawing over a shrivelling Hindu India. Mahmud of Ghazni raided the Indian frontier in 1000 A. D. The fierce iconoclasm and unrelenting pillage of the Sultan had bled India hard. The early rulers of Mahomedan India were too much occupied with conquest and order: economic development was relegated to the background. The accession of the Khiljis marked a welcome change however. In the reign of Alauddin, merchants from every part of the empire were required to register themselves in a 'Daftar.' The prices of articles such as cloth were regulated by the State and the Treasury made advances

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to the Multani traders for the large purchase of commodities.¹ The economic system of Alauddin went to pieces after his death. A lurid epoch of famine and destitution intervenes till the momentous reign of the Tughluqs. The Arab geographer Dimishqi writes: 'the Sultan has a manufactory in which 400 silk-weavers are employed, and where they make stuffs of all kinds for the dresses of the persons attached to the court, for robes of honour and presents,..... Every year the Sultan distributes 200,000 complete dresses ...

'The Sultan keeps in his service 500 manufacturers of golden tissues, who weave the gold brocades worn by his wives or given away as presents to the nobles and their wives.'² The State manufactory was born of industrial paternalism which throughout Medieval India was a virtue out of necessity, lacking individual enterprise. Shams-i-Afif writes in the 'Tarikh-i-Firuz Shahi': 'The Sultan had 36 'Karkhanas' and tried his utmost to collect materials in them, each of them being filled with many kinds of valuable goods and things, the number of which cannot be computed..... Every year a large sum of money was spent in each

1 Ishwari Prasad.

2 Elliot.

HISTORICAL BACKGROUND

Karkhanah.....Each Karkhanah was placed in charge of a great lord (Khan) or notable chief (Malik).¹ Afif records that the Sultan promulgated a standing order whereby the Prefect of Police searched out any craftsman out of employ to be provided in the 'Karkhanas' or in the houses of the nobility according to the workman's capacity.

Both Marco Polo and Ibn Batuta attest the extensive foreign commerce of Broach and Calicut, two famous centres of trade. To Calicut came merchants from all parts of the world. The Italian mentions the extensive cotton culture of Gujarat where cotton-trees were 'full six paces high and grew to twenty years.' Of the finest muslins and cotton-fabrics of the Telugu country Marco remarks: 'In sooth they look like tissue of spider's web! There is no king nor queen in the world but might be glad to wear them.'² The people of Malabar, he says, were born traders; to Malabar came merchants from Southern China, Arabia and the Levant.

At the sack of Delhi in 1398 A. D., the 'Zafar-nama' records: 'Several thousand craftsmen were brought out and distributed by Timur among the princes and officers.' Then

¹ Jadunath Sarkar.

² Yule.

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followed an era of economic decline. But the following notice of the bright flicker of vanishing prosperity by Mahuan (an interpreter to the Chinese envoy who visited Bengal in 1406 A. D.) is worth mention. Among the manufactures of Bengal were five to six varieties of cotton fabrics besides silk handkerchiefs and caps embroidered with gold, painted ware, steel, guns, knives and scissors. A sort of glossy white paper was made from the bark of a tree. Mahuan writes: 'The rich build ships in which they carry on commerce with foreign nations; many are engaged in tradewhile others exercise their crafts as mechanics.'¹

The State in Moghul India was the chief, in fact, the only manufacturer. It owned and maintained manufactories ('Karkhanas') in the principal cities of the empire. The State was the largest customer of textile fabrics and stocked an immense quantity of cloth for conventional distribution to nobility on ceremonial occasions.² Large numbers of skilled craftsmen were gathered into the imperial manufactories from all parts of the

¹ Phillips quoted by Ishwari Prasad.

² Industrial Decay, II.,

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empire. Abul Fazl writes: 'His Majesty pays much attention to various stuffs..... Skilful masters and workmen have settled in this country, to teach people an improved system of manufacture. The imperial workshops in the towns of Lahore, Agra, Fathpur, Ahmadabad-Gujarat turn out many masterpieces of workmanship; and the figures and patterns, knots and variety of fashions which now prevail, astonish experienced travellersThe imperial workshops furnish all those stuffs which are made in other countries. The 'Ain-i-Akbari' also mentions that in the imperial household were 'more than a hundred offices and workshops each resembling a city or rather a little kingdom'.

The artistic work in fabrics was of a varied nature; the embroidery work, more especially the 'kinkhwab', was executed in an immense variety of designs to suit the court. 'The shawl industry of Kashmir and the Punjab was distinctly the creation of the Moghul emperors.' In the reign of Shah Jahan, ornamentation, and the harmonious blending of colours reached the zenith of perfection in carpets and tapestry. The famed muslin industry of Dacca itself flourished largely owing to ~~imperial~~ imperial patronage, especially

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of Shah Jahan.¹ It is in evidence that Aurangazib, then viceroy of the Deccan, requisitioned the services in the imperial manufactories of the famed calico-printers of Masulipatam.

Bernier who saw the manufactories at work towards the middle of the seventeenth century wrote: 'Large halls are seen in many places, called 'karkanays' or workshops for the artisans. In one hall embroiderers are busily employed, superintended by a master. In another you see the goldsmiths; in a third, painters; in a fourth, varnishers in lacquer-work; in a fifth, joiners, turners, tailors, and shoe-makers; in a sixth manufacturers of silk, brocade, and those fine muslins of which are made turbans, girdles with golden flowers, and drawers worn by females, so delicately fine as frequently to wear out in one night.'²

Journeying through India in the seventeenth century, the French traveller Tavernier wrote that at Benares were two 'galleries' where they sell cottons, silken stuffs, and other kinds of merchandise. The majority of those who vend the goods are the workers who have made the pieces, and in this manner foreigners obtain them at first hand.

¹ Jadunath Sarkar.

² Constable and Smith.

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The long tale of our industrial prosperity is ended. To a 'golden India' attracted by its riches and manufactures came the merchant companies of Europe flooding the main. We have arrived at the transition to industrial decay.

RETROSPECT

I

THE Indian Cotton Industry is, perhaps, as old as Indian civilization itself. In the ancient empires of Egypt and Assyria Indian cottons were in vogue: Egyptian mummies have been discovered wrapped in Indian muslin of the finest quality. The Old Testament mentions Indian cloth by its Sanskrit name 'Karpasa.' 'The muslins of Dacca were known to the Greeks under the name 'gangetica,' a word suggestive of their origin from the banks of the Ganges.' I have mentioned the earliest notices of our fabrics by Herodotus, Megasthenes, Strabo, Pliny and the 'Periplus Maris Erythraei.'

From the earliest times till almost the beginnings of the eighteenth century India was the cotton manufactory of the civilised world. A Portuguese notice runs that 'every one from the Cape of Good Hope to China, man and woman, is clothed from head to foot' in the

RETROSPECT

cotton fabrics of India. Even Moreland concedes: 'the fact remains that cotton-weaving was by far the most extensive industry in India and I think it fair to say that the aggregate production was one of the great facts of the industrial world of the year 1600.' And reinforces: 'it is scarcely exaggerating the position to say that there was something approaching to a general market for superior qualities of cloth.'

Then India boasted of four principal export markets reaching far into the East and West. The first extended from Cape Gardafui to the Cape of 'Good Hope. Arabia was the second whence cotton goods were transported into Egypt and found their way into the Mediterranean. In the East, Malacca and the islands centring it formed an important market while Japan itself favoured Indian cloth 'for the new and strange fashions and paintings thereof, being a people desiring change.' And the far Eastern markets formed the emporia for Indian cotton cloth which crossed the Pacific to the Philippines and even to Mexico. Nearer home, the region of Burma was an important customer of our cotton textiles.¹

The master-pieces of our cotton manufacture have received unstinted praise by

¹ Moreland.

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every observer, ancient and modern. Baines writes: 'It cannot but seem astonishing that in a department of Industry where the raw-material has been so grossly neglected, where the machinery is so rude and where there is so little division of labour, the results should be fabrics of the most exquisite delicacy and beauty, unrivalled by the products of any other nation even those best skilled in the mechanical arts.' Tavernier, himself a great connoisseur of artistic stuffs, records: 'Mahamed Alibeg returning into Persia out of India, where he had been ambassador, presented Cha-sef the Second with a coconut, about the bigness of an ostrich egg, all beset with pearls; and when it was opened there was taken out of it a turband that had sixty cubits of Calicut in length to make it, the cloth being so fine that you could hardly feel it in your hand. For they will spin their thread so fine that the eye can hardly discern it, or at least it seems to me but a cobweb.' And also, 'when a man puts it on, his skin appears as plainly as if he was quite naked.' Such was the elegance and transparency of Indian cottons that 'the Emperor Aurangazebe was once angry with his daughter for showing her skin through her clothes; whereupon the young princess remon-

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strated in her justification that she had seven 'jamahs' on.'¹

Every village in India produced its cotton cloth. No caste was considered disgraced by spinning. Robert Orme wrote that it was 'difficult to find a village where every man, woman and child is not employed in making a piece of cloth' and adds that 'half the inhabitants of Hindustan were engaged in it.' Dr. Buchanan-Hamilton writing so late as 1800 says that people of every class, men and women, found in spinning and weaving a profitable occupation. In Behar, he noted, all the spinners were women who numbered not less than 330,000. In the district of Shahabad 59,500 women-spinners were employed; in the Bhagalpur district 160,000; in the district of Gorakhpur 175,600.

There were four principal regions of cotton manufacture: Dacca and the district around it; Masulipatam and the Coromandel; Gujarat with Cambay for outlet and the valley of the Indus.

The muslins of Dacca have been famed the world over for centuries. So fine was their texture that one method of testing their excellence was to pass a cloth measuring

¹ P. J. Thomas. *Mod. Rev.*, Jan. 1924

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twenty yards through a lady's ring. This test was in vogue as early as the ninth century A. D. 'The best test' says N. N. Banerji 'was the weight of the cloth proportioned to its size and number of the threads. It is said that two hundred years ago a piece of muslin, fifteen yards long by one yard wide, could be manufactured so fine as to weigh only 900 grains. Its price was £ 40.' Dr. Taylor writes that a skein of yarn measured two hundred and fifty miles for a pound of cotton. The familiar names of Dacca muslins are amply suggestive of their exquisite texture and transparency. Sir George Birdwood says: 'Among piece goods the best place is given to Dacca muslin, abrawan or 'running water', hafthawa 'woven air,' subbanam, 'evening dew', are plain white webs, the poetic names of which convey to the reader a true idea of their exquisite fineness and delicacy, and of the estimation in which they are held, than whole pages of literal description.' Dr. Taylor mentions in addition expressions in foreign parlance such as 'ventus textilis', the 'web of woven air' and 'cobweb' A Manchester manufacturer whose products could not attain the elegance of the muslin cried out in despair that it was but the 'shadow of a commodity.'¹ Baines thought

¹ D. R. Gadgil.

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that they might be the 'work of fairies or of insects rather than of men.'

Dacca always held the place of honour in Indian cotton industry. Its pre-eminence was as much due to the hereditary skill of the weavers as to natural conditions. It is observed that while English yarn swells on bleaching Dacca yarn shrinks and becomes the stronger by the process. The weaving of the muslin was an art of the highest order, doubtless requiring a remarkably delicate sense of touch and exquisite fingering. James Mill's description of the weaver of Bengal deserves quotation: 'It is a sedentary occupation, and thus in harmony with his predominant inclinations. It requires patience, of which he has an inexhaustible fund. It requires little bodily exertion of which he is always sparing; and the finer the production, the more slender the force which he is called upon to apply.'

Sir George Birdwood said writing in 1800 that 'the once celebrated Dacca muslins are almost a thing of the past.' But writes Mr. Banerji: 'It is generally believed that the artists of the present time have lost that manipulative skill and the delicate touch of hand of which such gossamer was formerly produced... It may all be true but there is no doubt if a demand arises the finest fabrics

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ever made at Dacca can still be made there... there are still a few families at Nawabpur who can produce these exquisite fine fabrics, if specially ordered to do so.' ¹

Besides Dacca, muslins were produced in Sonargong (whose fabrics received the notice of Abul Fazl), Teetbadi, Junglebari, Bazetpur etc. Outside Bengal, the muslins of Benares have a historic repute, while Kotah in Rajputana, Chanderi in Gwalior and Arni in the North Arcot District fabricated muslins second only to those of Dacca. Tavernier writes: 'White Calicuts come partly from Agra, and about Lahore, part from Bengala, some from Brouda, Baroche, Renonsari and other places.'

It is illustrative of the localisation of cotton manufacture that while Bengal specialised in muslins, the Coromandel was renowned for its chintzes (though Masulipatam itself has a record of over two thousand years in muslin manufacture). Arrian mentions the immense traffic in the dyed sheets of Masulipatam. Marco Polo, writing in the thirteenth century thought that Masulipatam 'produced the finest and most beautiful cottons that are to be found in any part of the world.' What distinguished

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the chintzes of Masulipatam were the exquisite designs and the splendid floral decoration with the smallest detail faithfully worked out. The fabrics of Masulipatam found an export market in Malacca and beyond, in Achin, Pegu and Tenasserim. Chintzes were also produced in Kalahasti and Madura.

On the Coromandel coast, Nellore had at one time a flourishing trade with the West Indies in the blue 'palampores' till the abolition of slavery in those islands. The 'pintados' (painted goods) of Pulicat and S. Thome found favour in the Molucca Islands in especial. There seem to have been at least forty different descriptions of cotton goods on the Coromandel coast at the advent of the Dutch. Among the principal centres of cotton manufacture on the Coromandel were Vizagapatam, Pulicat, Arcot and Madras, producing long-cloths, 'ginghams' and the much-prized hand-kerchiefs.

Cambay drew its cottons from Ahmedabad, Pattan, Broach, Baroda and Surat. The cheap, strong fabric of Gujarat was eminently adapted for the poorer markets of Africa and Arabia : so extensive was its vogue that from Africa on the one hand to the coast of China, in Ceylon, Pegu and Malacca, Cambay cloth

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was a much-used fabric. William Finch¹ writing in 1609 mentions a variety of goods in the region of Gujarat: the different sorts of 'baftas' (Gujarat calicoes), the finer products of Broach and the coarser stuffs around for which there was an immense foreign demand culminating in the famine of 1630.

The large English imports of Indian calico called forth the notice of James I in 1623 and on inquiring of their disposal was informed that 'much of it is very useful and vends in England, whereby the prices of lawns, cambrics, and other linen cloth are brought down; for the rest, England is now made the staple for that commodity, which having first served His Majesty's dominions, the overplus is transported into foreign parts in the nature of a home-bred commodity. The King approved exceedingly thereof, and said that this was the ready way to bring treasure into the Kingdom.'²

The products of the Indus valley were shipped along the Persian Gulf to Arabia or traversed the coastline to Goa. On the Indus system Lahore, Multan, Sukkur and Tatta were important centres of cotton manufacture. Tatta was famed for its chintzes while

¹ Moreland.

² Ibid.

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Jalandar Doab in the Punjab was particularly noted for its diapers. The 'dangari' or coarse stuff was manufactured everywhere in Sind. The fabrics of Sind, especially of Tatta, found an outlet at Lahari Bandar (the port has disappeared) and crossed the Persian Gulf to Basra where they were most in request.

The products of other regions may be brought together generally. In the North-West Frontier, the 'lungis' of Peshawar and Kohat were well-known throughout the East; the striped 'gabrums' of the United Provinces had a splendid vogue; the artistically bordered 'dhotis' of Umrer and Paoni in the Central Provinces were unsurpassed; the turbans of Yeola and Nasik had a large demand and the region around Rajahmundry still holds its own among the ancient centres of cotton-weaving.

II

In the history of the Indian Woollen Industry we recognise two principal classes of manufactures: the shawls or 'chadars' and the pile-carpets.

Kashmir stands in the front rank of the historical seats of the shawl industry. For

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centuries it has produced shawls which boasted of an extensive market at one time reaching to Europe. Its important overseas customer was France until the outbreak of the Franco-German War after which the European market was effectively closed to Kashmir shawls. Indeed, the very name 'cashmere' has come to be used in modern commercial parlance for a certain quality of fine woollens. The Kashmir shawl is woven of the 'pashm' or the soft undercoat of wool of the shawl-goat' which is a native of the Himalayan Plateau. The industry itself owed much of its prosperity to the imperial patronage of Akbar: Abul Fazl mentions that shawl production had established itself also in Lahore where there were more than a thousand manufactories. The great famine of 1830 drove the weavers of Kashmir into the plains of the Punjab and henceforth Amritsar, Ludhiana, Nurpur, Tilaknath, Sialkot and Lahore marked a rapid advance in the manufacture of shawls. But their products by no means attained the excellence of the original makes of Kashmir: 'The shawls of Nurpur and Tilaknath are not much prized; the work is inferior, but the great cause of inferiority is the hardness of water, which communicates a roughness to the shawls, greatly detracting from their

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marketable value.' The material suffered a marked decline as wool from Persia and Australia rapidly displaced the indigenous 'pashm.' The imitation stuffs of Paisley dealt the last blow to the Kashmir shawl industry.

Rampur is famed for its 'chadars'. Of a 'chadar' made by order of a late Gaekwar, Sir George Birdwood writes : 'It was composed entirely of inwrought pearls and precious stones disposed in an arabesque fashion, and is said to have cost a krór of rupees. Although the richest stones were worked in it, the effect was most harmonious. When spread out in the sun, it seemed suffused with an iridescent bloom, as grateful to the eye as were the exquisite forms of its arabesques.'

The 'chogas' or woollen long coats, which the Northern Indian upper class have worn from immemorial times, have come into vogue in England for dressing-gowns. They are composed of 'patu' or wool and richly embroidered with silk or gold. Among the principal centres of their production may be mentioned Kashmir, Ludhiana and Amritsar in the Punjab and Sind.

It is probably true that we had a carpet industry of our own long before the influx of Persian models. At least Multan 'in the

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Punjab lays claim to be among the earliest seats of Indian carpet-weaving, dating even prior to the advent of the Persian influence. In the time of the emperor Akbar, Lahore and Agra had attained to an extraordinary level of pre-eminence among the centres of the carpet industry. Kashmir has manufactured carpets from immemorial times. So extensive was their vogue that they were in requisition even in South India. But the carpets which claimed notice in Europe as being distinctly Indian were, probably, those of Masulipatam and Cocanada. The products of Masulipatam deserved honourable mention by Sir George Birdwood who wrote that the carpets 'were formerly among the finest produced in India.' The immense export trade of the carpets of Masulipatam led singularly to the undoing of the industry. 'The English importers insisted on supplying the weavers with cheaper materials, and we now find that these carpets are invariably backed with English twine. The spell of the tradition thus broken, one innovation after another was introduced into the manufacture.' Today the excellent workshop in the National College ministers to a fitful demand. The carpets of Warangal in the Hyderabad State were deemed among the finest at the London Exhibition of 1851.

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They were remarkable for the exceedingly fine stitches which numbered nearly 12,000 to the square foot. Birdwood writes that 'they were also perfectly harmonious in colour, and the only examples in which silk was used with an entirely satisfactory effect.' The ancient city of Cambay in Gujarat and Mirzapur in the United Provinces are among the historical seats of the carpet industry while Rajputana and Central India have a fair record in carpet manufacture.

Besides the pile-carpets must be mentioned the 'shatranjis' or plain carpets which sometimes display a strikingly artistic design. They are both in cotton and wool and come from all parts of India. Among the centres of their production must be mentioned Adoni in Madras; Rangpur in Bengal; Cambay, Dharwar and Ahmadnagar in Bombay; Multan and Sialkot in the Punjab and Quetta in Baluchistan.

Four influences were at work in destroying the carpet industry: the European demand, the Austrian book on Oriental carpets, the mineral dyes, more especially aniline, and 'the disastrous competition of the Government jails in India with native weavers.' The excessive European patronage led to the prescription both of the quality and the price

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of the carpets, ending in the progressive deterioration of their artistic value. The publication of the Austrian Commercial Museum while it popularised the artistic patterns, certainly destroyed all originality in indigenous design and paved the way to stereotyped production. The effect of the mineral dyes, on all textile industries generally and more especially in carpet manufacture where colour-effect counts for much, was to demoralise the indigenous weaver in his inevitable preference for cheaper dyes of modern invention. The tinctorial excellence of former products has rapidly given place to the discordant effects of modern colours which can hardly compete with native dyes in respect of durability.

III

The beginnings of Indian Sericulture are wrapped in uncertainty. It is, perhaps, true that the oldest Indian references to silk point to an imported mulberry-feeding silk-worm. Brihaspati mentions balls of silk. The author of the 'Periplus of the Erythræan sea' records silk as an important article of ancient Indian commerce. Indian silk fabrics, it is said, were sold in Rome in their equivalent weight

in gold. Be this as it may, Varthema's assertion that Gujarat supplied 'all Persia, Tartary, Turkey, Syria, Barbary, Arabia, Ethiopia' with 'silk and cotton stuffs'¹ must contain a ^{kernel} ~~kernel~~ of truth. Barbosa says that in the beginning of the seventeenth century silk fabrics were exported from Gujarat to the East African coast and to Pegu. Sir George Birdwood writes: 'Before the beginning of the 16th century the silks, brocades (kincobs), and dyed cotton cloths of Ahmedabad which generally bear the name of Cambay, the port of their shipment, were in demand in every eastern market from Cairo to Peking. The wild tribesman of the Malayan Archipelago did not consider his freedom earned until he had stored up a pile of them equal in weight to himself. On the coast of Africa these were exchanged for four times their weight in gold.' Besides this extensive market overseas, there was a considerable home demand as silks were greatly in requisition by the better-placed in contemporary society. In the flourishing courts at Agra and Vijayanagar silk was the rage and formed the staple of the wardrobe of the aristocracy. The silks of Bengal called forth the well-merited praise of Bernier who wrote: 'There is in Bengale such a quantity

1 Moreland.

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of cotton and silks, that the Kingdom may be called the common store-house for those two kinds of merchandise, not of Hindoustan or the Empire of the Great Mogol only, but of all the neighbouring kingdoms, and even of Europe.' He certainly did not think the stuffs so fine as those of 'Persia, Sayd, and Barut' but of a much lower price and he knew 'from indisputable authority that, if they were well selected and wrought with care, they might be manufactured into most beautiful stuffs'. In the seventeenth century Tavernier estimated the total output of silk at about two and half million pounds.¹ Long afterwards Governor Verelst wrote that the silks of Bengal 'were dispersed to a vast amount to the west and north, inland as far as Gujarat, Lahore, and even Ispahan.'

We recognise three indigenous silk-worms in India, the 'tasar', the 'muga' and the 'eri' beside the mulberry-feeding insect proper, *Bombyx mori*. The 'tasar' is fed on jungle trees and is a native of the southern slopes of the Himalayan chain and of the central Indian plateau. The culture of the 'muga' belongs to Assam and Eastern Bengal, the silk being gathered from the cocoons of the '*Saturnia assamungis*.' From immemorial

¹ Moreland

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times the indigenous silks furnished the common dress of the people of Assam, especially of the women. In Assam 'silk is still very largely worn, and there are few Assamese so poor as to have no silk cloths in the house'. The 'eri' is reared upon the leaves of the castor-oil plant (*Ricinus communis*), its silk being very difficult to reel and in itself a specialised art confined to the Khasi hills of Assam from ancient times.

Bengal stands foremost among the principal centres of Indian silk production. From the first Bengal was eminently suited to the culture of mulberry which could not flourish either in Northern India or in Bombay. Bombay itself noted for its silk manufactures, drew its supplies of the fibre from Persia and Bengal. Malda has an ancient claim to sericulture and it is in evidence that in 1577, one Shaikh Bhiku, a trader in the silk fabrics of 'Malda set' sail for Russia with three ships laden with silk cargo¹. The Maldahi products were chiefly undyed piece-goods and 'bundanas'. So late as 1807 Dr. Buchanan estimated the total turnover at Rs. 120,000, no less than 500 houses of weavers finding employment in the industry. The silk industry of Murshidabad

1. R. O. Ray, *Mod. Rev.* Feb. 1983

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was mainly fostered by the patronage of the native court which was set up by Alivardi Khan taking up residence there. Besides Malda and Murshidabad, Rajshahi deserves mention as a centre of silk-culture. In Manipur itself, the Bombyx mori, imported from China, has been existent for centuries. The East India Company were from the beginning interested in silk production and Governor Verelst in 1767 personally urged the zamindars present at Murshidabad 'to give all possible encouragement to the cultivation of mulberry.' A colony of silk-weavers was imported from Italy in 1769 and the first silk cloth produced under Italian instruction reached England in 1772 after which there was a progressive demand for Bengal silks.

Mysore has an ancient record in the manufacture of silks. Dr. Buchanan-Hamilton noticed that the silkweavers of Bangalore turned out a strong rich fabric which was tinged by indigenous dyes made from lac or turmeric. The silk-worm itself is said to have been introduced by Tipu Sultan into Mysore.

Among the artistic manufactures in silk, the 'Kamkhwabs, or gold brocades, the brocades in silk without metallic filigree and the mixed stuffs or 'mashru' (with a cotton warp crossed by a woof of silk) deserve

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especial notice. The 'Kamkhwabs' were silk textiles richly brocaded with gold or silver thread, the pattern being thrown on the surface. In the original products of former days there was a preponderance of metallic thread, the silk being employed to serve as a body to the textile. The names given to the 'kamkhwabs' are fully expressive of their brilliant texture, as: 'chand-tara' (moon and stars), 'murgala' (peacock's neck), 'shikargah' (hunting ground) and 'mazchar' (ripples of silver). Benares, Murshidabad, Ahmedabad, Surat, Raichur and Trichinopoly were among the famed centres of 'kamkhwab' manufacture. 'The brocade of Surat and Ahmedabad,' says Mr. Edwards, has 'gained a reputation which cannot lightly pass into oblivion.' The industry is, perhaps, as old as the time of Megasthenes. The second class of manufactures is known by the name of 'himrus' which consists of a soft cotton textile brocaded over with silk patterns. They were variously serviceable, as coats for men and bodices for women. The principal seats of the industry were Aurangabad and Trichinopoly. The name 'Mashru' given to mixed stuffs means 'permitted' and refers to the ceremonial law of Mahomedans which does not permit the wearing of pure silk. Agra, Hyderabad in

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the Deccan and Tanjore and Trichinopoly, in the presidency of Madras specialised in the manufacture of mixed stuffs.

IV

Of the Indian Iron Industry Justice Ranade writes: 'The iron industry not only supplied all local wants, but it also enabled India to export its finished products to foreign countries. The quality of the material turned out had also a world-wide fame..... Cannons were manufactured in Assam of the largest calibre. Indian 'wootz' or steel furnished the materials out of which Damascus blades with a world wide reputation were made; and it paid Persian merchants in those old times to travel all the way to India to obtain these materials and export them to Asia. The Indian steel found once considerable demand for cutlery even in England. The manufacture of steel and wrought iron had reached a high perfection at least two thousand years ago.' The following is from the Imperial Gazetteer of India: 'The high quality of the native-made iron, the early anticipation of the processes now employed in Europe for the manufacture of high-class steels, and the artistic products in copper and brass gave the country a

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prominent position in the ancient metallurgical world.' And in another place it has: 'There is no doubt that the existing manufacture of wrought iron by a direct process was widespread before the date of the most ancient historical records, while the manufacture of the ancient 'wootz' anticipated by many centuries the cementation process developed in Europe for making the finest qualities of steel.' The production of Indian 'wootz,' says Ball, 'was the cause of much wonderment and became the subject of various theories' in England.

Historical mention of our iron industry is not wanting. The gift by the Malavas of a hundred talents of 'white iron' to Alexander of Macedon has been mentioned already as also the famous Iron Pillar at Delhi belonging to the age of Samudragupta. The iron pillar, Ball remarks, 'consists of pure malleable iron without any alloy, and it does not rust although it has been exposed to the air for centuries. This work is the most complete testimony of the skill and art of the Indian iron makers of 4500 years ago.' Abul Fazl mentions that production in iron of a high quality flourished in the Moghul provinces of Bengal, Allahabad, Agra, Berar, Gujarat, Delhi and Kashmir. The Dutch fostered the

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iron industry in the delta of the Godaveri and the considerable volume of Dutch exports in iron and steel from Masulipatam about 1660 bespeak a flourishing industry, due probably to the Batavian demand.

The village was naturally the seat of the ancient Indian iron industry. The village smith forged the agrarian implements necessary for tilling as also other articles for rural life. The Indian life of active warfare at one time fostered a thriving industry in the manufacture of arms which has been dealt a hard blow by the introduction of deadlier weapons of modern invention and by the virtual dispossession of arms by the Indian following British rule. The Indian 'talwar' or sword was a marvellous product, with an exquisitely watered blade on which were engraved sometimes date and name. The Punjab and Sind, Monghyr in Bengal and Vizianagaram in the Madras presidency manufactured match-locks and other arms; Kashmir and Cutch turned out chain-armour 'fine as lace work' while Ahmadnagar is famed for its spear-heads.

Damascening, was chiefly practised on iron and steel, the work being known as 'koftgari.' Damascening took its origin from the encrustation of the blades of swords and

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weapons. Kashmir, Gujarat, Sialkot and Hyderabad were the principal centres of Indian damascening. The damascening of steel lingered till the thirties of the nineteenth century in South India. Damascening in silver usually on bronze is known as 'bidari, from the ancient capital of Bidar in the Hyderabad State.

Three important factors were at work in the virtual extinction of our iron industry. With the disappearance of the native potentates and with them the almost 'medieval' conditions of warfare, the principal demand for the manufacture of weapons was cut off. The Arms Act did the rest. Speaking of the Punjab, Baden Powell says that 'very few of the best makers who still remember the Sikh days or have learnt from the armourers of those times, hold licenses and are able to ply their trade.' Foreign competition, as ever, made it difficult for the individual producer to compete successfully with the superior methods of European production. The restrictions imposed by Government on the felling of wood for use as fuel must have told on the industry to some extent at least.

Enamelling and other Arts

'Enamelling' wrote Sir George Birdwood, 'is the master art-craft of the world, and

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enamels of Jaipur in Rajputana rank before all others, and are of matchless perfection.' The history of the art itself is obscure. Labarte thought that enamelling originated in Phoenicia and thence spread to the Persians from whom the Greeks and the Indians acquired it. Hendley believes that the art was Turanian in origin: he says that enamelling 'was known at an early period, if it did not originate, in Scythia, the home of the Turanians'. Birdwood thought likewise and opined that 'it is probably a Turanian art. It was introduced into China, according to the Chinese, by the Yeuechi, and was carried as early, if not earlier, into India.' Baden Powell speaks of its having come over from Kabul to the Punjab. The oldest piece of enamel known in India, however, is Rajah Man Singh's staff of state belonging to the reign of Akbar.¹

Enamelling consists in the ornamentation of the surface of the metal by the fusion over it of several mineral compounds. The types of Indian enamelling are broadly two, the 'champleve' or 'repousse' in which the mineral substances are embedded on the metal surface. The enamels of Jaipur are the finest in India. The enamel-work of Jaipur is also done on gold and the execution is so fine that the metallic

¹ E. N. Chatterjee.

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background all but disappears. Formerly Jaipur had excelled in the enamelling of sword-hilts and plates but the work has suffered deterioration artistically, the objects enamelled being of the nature of lockets and brooches. Besides Jaipur must be mentioned Bahawalpur and Cutch as seats of gold enamels. The enamels of Multan, Lucknow and Rampur are on silver. The enamelling of Kashmir is of a different kind and consists in fusing the metallic surface with paint and then raising it to a moderate temperature. Kashmir work is on copper and brass.

The antiquity of the Indian Glass Industry is borne out by such authoritative texts as the 'Arthasastra,' the 'Sukraniti,' the 'Amarakosa' and by the descriptions found in Pliny and the author of the Periplus. Pliny mentions that Indian craftsmen in his time made imitation precious stones. The Rig Veda refers to the use of glass ornaments by Indian women in the oldest times. It is in evidence that glassware of every description, from mirrors to drinking-cups were in vogue in India in the early centuries of the Christian era. The Burmese art of glass mosaic employed in the decoration of pagodas by which the ceiling and

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the walls and pillars are ornamented with coloured glass is well known. The Mahomedan taste for painted glass fostered the production of coloured glassware which reached a high pitch of excellence in the Moghul epoch. Watt writes: 'A glass gulab bowl and a hooka bowl found in the Mahomedan capital, Bijapur, were shown by Major Cole, R. E. at one of the Simla Arts Exhibition. These he describes as probably of the sixteenth century.'

The indigenous glass industry survives today in the manufacture of bangles and ornamental glassware in several parts of India but more especially in the Punjab, Behar, Bengal and in the Bombay presidency. Dr. Watt thought that in the indigenous manufactures of glass too much alkali was employed and too little heat applied resulting in the coarseness of the material with flaws and air bubbles. The fuel employed in the processes of smelting and manufacturing is commonly wood which does not give the higher temperatures necessary for efficient production. In Italy, Japan and Austria the manufacture of glass survives, indeed, as a cottage industry but better and improved furnaces are made use of and coal is employed

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for fuel.¹ Today in India the machine glass industry is wholly crushing out our major indigenous glass manufactures.

VI

It has been claimed that India is the birth-place of the sugar-cane. Philological evidence, indeed, seems to justify this assumption: Sanskrit 'Sarkara' beside 'sugar,' 'sucre,' 'zucker,' 'Azucar' in the several languages. In ancient Greece sugar was known by the name of Indian sweet salt. The sugar-cane spread eastward and westward from India: in the East it reached as far as Japan and Formosa through China and Siam; in the West it spread to the countries which form the shores of the Mediterranean through Persia, Arabia, Egypt, Sicily and crossed the Atlantic over to America. It is in evidence that the Chinese Emperor Tai Tsung (A. D. seventh century) sent men over to Behar to be instructed in the art of sugar manufacture as the processes of preparing, refining and crystallising sugar were practised in India from ancient times.²

A distinct knowledge of our traffic in sugar commences from the days of the East

¹ N. M. Pal

² V. P. Iyer.

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India Company. The Company's exports were mainly confined to the crystallised sugar from Bengal but gradually the West Indies (and especially Mauritius) were considered more adapted to the cultivation of the sugarcane by reason of their soil and climate and the British demand for Indian sugar fell off being, in fact, shut out by prohibitive import duties. The establishment of large refineries in Great Britain about 1845, however, created a fresh demand for Indian raw sugar. But refineries with European methods were established in India soon after with little effect indeed, as the import of foreign sugar which commenced about 1850 began to increase steadily. A revolutionising factor in the history of the sugar industry brought this about. The principal source of sugar supply for the continent of Europe till the nineteenth century were the tropics, more especially India and the Indies. But the discovery in 1747 by a German scientist of the possibilities of beet-root transformed entirely the manufacture of sugar. The beet-sugar industry prospered with such astounding success that ere long the relatively cheap product of Europe successfully contested the Indian market driving indigenous sugar off the field. But the duties applied by the Government of India to

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bounty-fed sugar imports and the provisions of the Brussels Convention gave a turn to the sugar trade and Java was henceforth the principal source of sugar supply for Indian consumption.

The rest of the history of the sugar industry is too near our own times and an account of the Indian factory industry in sugar is beyond the scope of this volume.

VII

The Romance of Indian Shipping has been ably told by Professor Radhakumud Mookerjee. I will not undertake any elaborate account of our shipbuilding industry as such a discussion constitutes but a fraction in the sequence of my narrative. Only the merest outline is sketched here.

Professor Mookerji cites Buhler's opinion to 'prove the early existence of a complete navigation of the Indian Ocean, and of the trading voyages of Indians' and instances the several references to our maritime activity in the Rig Veda and the Indian epics. The golden age of Indian Shipping was reached in the time of Pulakeshi II when 'the imperial fleet was thoroughly organised, consisting of

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hundreds of ships' and 'swarms of daring adventurers' from Gujārat launched their vessels over the main in the zeal of colonisation sailing as far as Java. Bengal has a maritime record dating from very early times and the merchant-adventurer Srimanta is represented to possess merchantmen trading to the Coromandel coast, to Ceylon, Malacca, Java and China.'

Moreland refers to a flourishing shipping on the river systems of the Ganges and the Indus in the reign of the Moghuls. 'The vessels available on the Jumna sufficed on occasion to transport Akbar's enormous camp' and Fitch is reported to have travelled from Agra to Bengal with a fleet of 180 boats. The boats in use ranged up to 500 'tuns' and were built at Lahore and Allahabad. 'The great bulk of the commerce in the Indian seas,' says Moreland, 'was carried in ships built in India,' and concludes: 'It is practically certain that India also built all the small boats required for the coasting trade as far as Sind, and the aggregate volume of shipping was therefore very great when measured by contemporary standards.' Moreland estimates the aggregate of Indian merchantmen at a maximum of 60,000 tuns.

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F. Baltzar Solyons, a French traveller wrote in 1811 that 'in ancient times the Indians excelled in the art of constructing vessels, and the present Hindus can in this still offer models to Europe — so much so that the English, attentive to everything which relates to naval architecture have borrowed from the Hindus many improvements which they have adopted with success to their own shipping.'¹ Mr. Digby writes: 'A hundred years ago ship-building was in so excellent a condition in India that ships could be (and were) built which sailed to the Thames in company with British-built ships and under the convoy of British frigates.' The Marquis of Wellesley said in 1800: 'The port of Calcutta contains about 10,000 tons of shipping, built in India, of a description calculated for the conveyance of cargoes to England..... From the quantity of private tonnage now at command in the port of Calcutta, from the state of perfection which the art of ship-building has already attained in Bengal, (promising a still more rapid progress and supported by abundant and increasing supplies of timber), it is certain that this port will always be able to furnish tonnage, to whatever extent, may be required for

¹ J. M. Ganguli. *Mod. Rev.*, Sept. 1928

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conveying to the port of London the trade of the private British merchants of Bengal.’¹

But ‘the arrival in the port of London of Indian produce in Indian-built ships created a sensation among the monopolists which could not have been exceeded if a hostile fleet had appeared in the Thames. The ship-builders of the port of London took the lead in raising the cry of alarm; they declared that their business was on the point of ruin, and that the families of all the shipwrights in England were certain to be reduced to starvation.’² The East India Company were not slow to act on this cry of alarm. In their despatch of the 27th January 1801, they raised specific objections to the manning and building of ships in India. Among the objections was the curious plea that ‘men of that race (Indians) are not by their physical frame and constitution fitted for the navigation of cold and boisterous latitudes,’ that ‘they have not strength enough of mind or body to encounter the hardships or perils to which ships are liable in the long and various navigation between India and Europe,’ that the native lascars were ‘on their arrival here, led into scenes which soon divest them of the respect

1 Digby.

2 Quoted by Pandit Malaviya.

and awe they had entertained in India for the European character.' And 'considered, therefore, in a physical, moral, commercial, and political view, the apparent consequences of admitting these Indian sailors largely into our navigation, form a strong additional objection to the concession of the proposed privilege to any ship manned by them.'¹

The Indian, however, was the master ship-wright. By a curious irony 'in 1802 the Admiralty ordered men-of-war for the King's Navy to be constructed at this spot (the Bombay Dockyard). They intended to have sent out an European builder, but the merits of Jamshetjee being made known to their lordships, they ordered him to continue as master-builder.'²

VIII

The most important economic survey of modern times was that undertaken by Dr. Francis Buchanan-Hamilton in 1800 at the instance of the Marquis of Wellesley. Dr. Buchanan journeyed through the vast extent of the country and the results of his investigations published in London are a lasting

1 Digby

2 J. M. Ganguli

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monument to his painstaking observation. His inquiries have a peculiar interest for us as they register from the pen of a judicious observer the final glow of our industrial prosperity. I will set down below the more important of Buchanan's observations.

✓ In the province of Mysore in the vicinity of Savanadurga iron was smelted and forged into agrarian implements while weapons were made of steel which was, moreover, drawn into wire for use in musical instruments. Bangalore was an important centre of commerce and industry. In its markets met the traders from Poona and Surat, Kashmir and the dominions of the Nizam. The local manufactures were in cotton and silk which were tintured by an indigenous dye prepared from lac, turmeric or indigo. The weaving of cloth was an honourable occupation which enlisted men and women of every rank. Women went out to buy the cotton at weekly markets, spun it at home and sold the thread to weavers. In the territory adjoining Madhugiri iron was smelted while a variety of coarse cloth and muslin formed the output in textiles. Gubbi was an important mart into which flowed blankets, sack-cloth, iron and steel from the country.

RETROSPECT

In the district of Coimbatore over four hundred and fifty looms were functioning but already the system of advances by the Commercial Resident was coming to tell on the occupation. Iron was smelted at China Mali.

The Moplahs of Malabar were prosperous tradesmen and possessed vessels which voyaged as far as Mocha, Surat, and Madras. Calicut specialised in the manufacture of long cloth and a Commercial Resident was busy making advances and had established a factory at Palghat also.

Onore in the Canara district was an important centre of commerce and possessed a vast dock built by Hyder Ali for building fleet.

Dr. Buchanan's Northern Indian tour commenced in 1807.

In the district of Behar the looms employed in the manufacture of chadars and table-cloths numbered seven hundred and fifty and the annual turnover was valued at Rs. 81,400. Tasar silk cloth was woven in Phatuha, Gaya and Nawada, the annual produce being estimated at Rs. 421,710. Among the principal industries of the district may be mentioned the manufacture of paper, tanning, iron-work, dyeing, the weaving of blankets and pottery.

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The products were conveyed from Patna to Calcutta in boats and the carrying trade was a lucrative profession.

The most important industry of Shahabad consisted in the manufacture of cloth, the thread being produced to the annual value of Rs. 1,450,000. Raw silk was exported to Ratanpur. Other manufactures included paper, perfumery and oils.

In the Bhagalpur district was a variety of manufactures, cotton carpets or satranjis, chintzes and blankets in the textiles: bracelet-manufacture, iron-work, pottery and tanning. The production of a mixed cloth from cotton and tasar was specialised and no less than 3,275 looms were so employed. Each weaver made an annual profit of forty six rupees.

The industries of Gorakhpur ranged from boat-building to the manufacture of sugar. About four hundred boats were built annually. The iron-smith fashioned articles of husbandry while the carpenter made carts and palanquins. Braziers manufactured utensils and ornaments. Over five thousand and four hundred families lived by the loom which brought an annual income of thirty six rupees. Chintzes and blankets were woven at Nawabganj.

RETROSPECT

The district of Dinajpur in Bengal was famed for its Maldahi cloths of a silk warp and a cotton woof. There were as many as four thousand looms in Malda. Cotton-spinning occupied the spare time 'of all the women of higher rank, and of the greater part of the farmers' wives.' The Mahomedan housewives of Malda found employment in chikan-work or in the floral decoration of cotton cloth. Dyeing was done in indigo, lac, safflower and turmeric. Other industries comprised bracelet-manufacture, tanning, metal work in copper and iron and the manufacture of sugar and indigo. Already the plantation of indigo under European enterprise was proving oppressive.

Purnea led in the cotton industry. The thread spun annually was valued at Rs. 1,300,000 bringing a net profit of Rs. 1,000,000. The textile manufactures consisted of Satranjis and tapes, blankets and other woollen stuffs. 13,500 looms were employed in the District.

TRANSITION

I

THE shadows of industrial decline were drawing even towards the bright day of the Moghul epoch. Doctor Bernier said writing to Colbert : ' No artist can be expected to give his mind to his calling in the midst of a people who are either wretchedly poor, or who regard not the beauty and excellence, but the cheapness of an article : a people whose grandees pay for a work of art considerably under its value and according to their own caprice, and who do not hesitate to punish an importunate artist, or tradesman with the Korrah, that long and terrible whip hanging at every Omrah's gate.....it should not be inferred from the goodness of the manufactures, that the workman is held in esteem, or arrives at a state of independence. Nothing but sheer necessity or blows from a cudgel keeps him employed; he never can become rich, and he feels it no trifling matter

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if he have the means of satisfying the cravings of hunger, and of covering his body with the coarsest raiment. If money be gained, it does not in any measure go into his pocket, but only serves to increase the wealth of the merchant.' Bernier who was resident in the empire of Shahjahan towards the close of the emperor's reign was a trained observer and the preceding account of the condition of the craftsmen is especially valid as coming from him who praised our industrial excellence in the highest terms. In his letter to Monsieur Mothele Vayer (first of July 1663) Bernier writes again: If the 'artists and manufacturers were encouraged, the useful and fine arts would flourish; but these unhappy men are contemned, treated with harshness, and inadequately remunerated for their labour. The rich will have every article at a cheap rate. When an Omrah or Mansebdar requires the services of an artisan, he sends to the bazar for him, employing force, if necessary, to make the poor man work; and after the task is finished, the unfeeling lord pays, not according to the value of the labour, but agreeably to his own standard of fair remuneration; the artisan having reason to congratulate himself if the korrah has not been given in part payment. How then can it be expected that any

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spirit of emulation should animate the artist or manufacturer? Instead of contending for a superiority of reputation, his only anxiety is to finish his work, and to earn the pittance that shall supply him with a piece of bread.'

The inference from the foregoing is clear. Towards the middle of the seventeenth century the artisan had fallen on evil days. He mostly worked to order and for ridiculously inadequate wages if he did not more often drudge for fear of menace. The fact was that Moghul society was a top-heavy structure with a pompous and extravagant Court whose requirements must needs be filled albeit with all the exercise of aristocratic authority. The style of the Court and its appendages had become a habit and a convention and the unresisting craftsmen were harnessed to their spiritless lot of mere wage-earners as the proper appreciation of artistic excellence and the just impulse that all good work must be adequately remunerated were thrown to the winds. The artisan worked with scarcely any hope of advancement, therefore, and laboured for the benefit of the middleman or the capitalist. Enlightened patronage was not wanting, however, and it is these bright patches of noble protection to fallen craftsmen that enliven the picture.

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The European factors repeat the same droll tale of artistic indifference. Francisco Pelsart who had been the chief of the Dutch factory at Agra through seven years wrote¹ concerning 'the manner of life of the rich in their great superfluity and absolute power, of the common people in their utter subjection and poverty.' He said: There are three classes of the people who are indeed nominally free, but whose status differs very little from voluntary slavery,..... workmen, peons or servants, and shop-keepers. For the workmen in all crafts, which are very numerouscan earn by working from morning till night only 5 or 6 tackas² The second scourge is the oppression of Governor, Nobles, Diwan, Kotwal, Bakhshi and other Imperial Officers. If one of these wants a workman, the man is not asked if he is willing to come, but is seized in his house or in the street, well beaten if he should dare to raise any objection, and in the evening paid half his wages, or perhaps nothing at all.'

The wages paid to the artisans were significant of the utter disregard into which skilled labour had fallen: on the East Coast,

1 Moreland

2 A taka was worth one-thirtieth of a rupee.

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Methwold¹ records that three pence a day were 'great wages to a master-workman; their servants are paid with one penny, and some less.' Much the same scale of remuneration prevailed in Northern India. And what was worse, there was a soulless uniformity of wages paid over all classes of crafts. There was scarcely any differentiation and preference for artistic labour as wages were standardised. The consequence of this practice is easy to see: craftsmen whose superior title to higher wages is overlooked let themselves suffer a voluntary decline in artistic effort lacking the stimulus to work. Even the menace of the korrah was hardly enough to counter-balance this inertia as workmen least put forth their best under the compulsion of over-weening authority.

II

'The ruin of Indian trades and industries' says Major Basu, 'may be said to have dated from the day when the Mogul Emperor with the generosity and magnanimity characteristic of an Asiatic sovereign granted such terms to the foreign Christian merchants of the British nationality trading in India which no

¹ Moreland

modern Christian power would ever think of giving to any Christian or non-Christian people.') It is precisely in these unthinking grants of commercial concessions to alien tradesmen that the seeds of our industrial decay were sown. 'The grant of such concessions ultimately leads to the annexation or what the modern Europeans call conquest of the country which grants them concessions. It is the introduction of the thin wedge in the body politic of the concession-giving country which brings about its subversion and ruin.' Herbert Spencer in giving some wholesome advice to Baron Kaneko of Japan to keep the Americans and Europeans as much as possible at arm's length remarked: 'In presence of more powerful races your position is one of chronic danger, and you should take every precaution to give as little foot-hold as possible to foreigners..... No further privileges should be allowed to people of other races, than is absolutely needful for the achievement of these ends. If you wish to see what is likely to happen, study the history of India.'

Yes, study the history of India. It would be absurd to wish any self-preserving principles of economic nationalism or rank chauvinism operating in those generous times

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but it is given to the historian of India to pronounce the verdict on those commercial grants as a tragic blunder of our well-meaning rulers.

INDUSTRIAL DECAY.

I

ROMESH Chunder Dutt 'the foremost of our authorities on Indian Economic History remarked: 'The decline of Indian manufactures and indigenous industries within the last 150 years is one of the saddest episodes of British rule in India, and presents one of the most difficult economic problems to Indian administrators at the dawn of a new century.'¹ Elsewhere he wrote with vehemence: 'It is, unfortunately, true that the East Indian Company and the British Parliament, following the selfish commercial policy of a hundred years ago, discouraged Indian manufacturers in the early years of British rule in order to encourage the rising manufactures of England. Their fixed policy, pursued during the last decades of the eighteenth century and the first decades of the nineteenth, was to make India subservient to the industries of Great

1 Cf. Fakhri Shah

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Britain, and to make the Indian people grow raw produce only, in order to supply material for the looms and manufactories of Great Britain. This policy was pursued with unwavering resolution and fatal success; orders were sent out, to force Indian artisans to work in the Company's factories; commercial residents were legally vested with extensive powers over villages and communities of Indian weavers; prohibitive tariffs excluded Indian silk and cotton goods from England; English goods were admitted into India free of duty or on payment of a nominal duty.'

Sir William W. Hunter completes the picture: 'On the one hand, the downfall of the native courts deprived the skilled workman of his chief market; while, on the other, the English capitalist has enlisted in his service forces of nature against which the village artisans in vain try to compete. The tide of circumstance has compelled the Indian weaver to exchange his loom for the plough, and has crushed many of the minor handicrafts.'

The decline of Indian industries, indeed, cannot be explained away by any single set of causes: they are the resultant of diverse adversely operating factors. It would thus be a gross subversion of historical circumstance

to lay the burden of the destruction on the mis-rule of the East India Company entirely and equally misleading to call the Industrial Revolution in England to account for the decadence of our manufactures. The truth, to my mind, seems to lie in the concurrent operation of several circumstances which it will be the purpose of the following pages to set forth. I will not take upon me the futile task of placing the causes of decay in any exact order of chronological precedence or succession but I will, on the other hand, determine their intensity so far as the knowledge of their effects will allow.

I have said that the shadows of industrial decline darken even the bright day of the Moghul epoch. It seems proper, therefore, to commence the woeful tale from the time of the later Moghuls and find in the gradual abolition of the native courts, following the wreckage of the Moghul Empire, the prime cause of the decay of urban art crafts. Then followed the influx of the foreign trading companies lured by our industrial prosperity and the English, the French, the Portuguese and the Dutch ran a mad race for commercial aggrandisement. In the competitive struggle for commercial supremacy the strongest ever survives and it is with the rule of the East

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India Company, or rather with their early mis-rule, that we will be concerned next. I shall record in some detail the oft-repeated tale of the commercial oppressions perpetrated in the Company's name, such as the abuse of trade-certificates, the harassing of the Indian artisan and the immense economic drain which the Company's 'Investments' entailed upon our country. The fallacious bogey of Free Trade in its bearings on our industry comes next for my examination and I shall recount the prohibitive system of British tariffs which effectually shut out Indian manufactures by a strange perversion of the doctrine of '*Laissez faire*.' The account of the inland duties, which forms the content of the section that follows, takes up the thread of the Company's misdeeds while the narrative of preferential duties on British manufactures, calculated to secure their promotion at the suppression of our industry, completes the role of duties in our industrial destruction. The change of fashion fostered by British rule in India is hard to place in the chronological sequence but it is certain that the cultural effects of British dominion went in hand with British imports. The educated Indian middle class and the English officials were the natural successors of the effete nobility and both alike

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turned their backs upon indigenous makes. The Industrial Revolution happened in England towards the middle of the eighteenth century and it is to this extraneous event that the supercession of our manufactures is chiefly due. The employment of labour-saving machinery making for large-scale production had an additional advantage in the cheapness of the output and ere long British manufactures had completely driven our products off the field. This single cause is apt to be overstressed. But it must be remembered that the machine-made textiles could hardly compete with indigenous manufactures in respect of excellence (the most perfect machine cannot replace the dexterous hand of man) and excellence was a quality which the well-to-do did not easily overlook while the poor preferred the cheaper stuffs of indigenous manufacture. The machine-makes ministered, therefore, to the intermediate section of the Indian population. These are the chief causes for our industrial decay. The introduction of the Railway and the institution of fairs and exhibitions, though potential benefits, by an unfortunate misdirection contributed to the suppression of our manufactures and I have given them their proper place in the narrative.

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II

Bernier wrote: 'The arts in the Indies would long ago have lost their beauty and delicacy if the Monarch and principal Omrahs did not keep in their pay a number of artists, who work in their houses, teach the children, and are stimulated to exertion by the hope of reward and the fear of the whip. The protection afforded by powerful patrons to rich merchants and tradesmen, who pay the workmen rather higher wages, tends also to preserve the arts.'

At the imperial Court at Delhi, says Abul Fazl, a taste for fine material had become general. Contemporary fashion prescribed an extensive wardrobe for entrance into good society. The Court itself was the distributor, on an immense scale, of splendid textiles on conventional occasions. It was, as I have said, the chief customer and patron of manufactures in the Empire. Its needs, indeed, were very great. Twice every year a 'khilat' or robe was presented by the Emperor to every mansabdar (of whom in 1690 there were no less than 11500). Moreover, the princes of the blood royal, the feudatory chiefs and the officers of Court received robes of honour on the two birth-days of the Emperor, according

to the solar and lunar calculations. Every robe of honour was a suit of extensive apparel. And all persons presented at Court or appointed to offices in the empire were invariably favoured with 'khilats'. The religious zeal of Aurangazeb extended the honour even to converts to Islam.¹

The last of the Great Moghuls passed away in 1707 and the imperial edifice of which he was the unflinching guardian fell to dust after his death. The abolition of the Moghul Court meant that the principal fountain of demand for artistic stuffs was 'stopped for ever. The diffused nobility, fallen on evil days, lacked the means wherewith to maintain their style of former living. But so potent is the force of conventional style that it lingers even after the prosperity that had at one time occasioned it has for ever passed away. The Court disappeared indeed, but the nobility remained and fostered a dwindling artisan population. But this luxury demand was progressively on the decline, as the scions of the noble stock being far removed from the magnificent epoch of the Moghuls were brought up to a decaying standard of living. Lacking patronage, the arts and handicrafts were starved out: the artisans were ruined. The

¹ Jadunath Sarkar.

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magnificent Court at Vijayanagar was swept away by the cruel hand of Time and the native Indian Courts died a various death, by extinction, annexation and supercession.

The dyeing industry at Lucknow owed its prosperity to the Nawabs of Oudh who prescribed the proper costume for the nobility to appear on festive occasions. In 1858, the province was annexed and the decline in the industry followed. Mr. Hoey¹ writes : '... for a few years after the Mutiny, the population of Lucknow suffered a sudden decrease. That section of the population, who were attached to the city by the special conditions of trade under native rule, also left.' Dacca has a similar tale to tell. From the day when Alivardi Khan left there and took up his residence at Murshidabad, Dacca marked a woeful decline in her artistic makes. The Court rapidly decreased and the demand for beautiful things fell off. The Madras Census Report for 1891 aptly remarks : 'The existence of a Court, even though a titular one, exerts a considerable influence upon the population of the town in which it is held, as it attracts numbers of all kinds of professions'² For, the existence of a Court arrests the pace of industrial decline and it is significant that

1. Cf. D. R. Gadgil.

2. Ibid.

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in most native states which did not pass under British rule, like Kashmir, the States of Rajputana and the dominions of the Nizam, the crafts lingered long after their disappearance in British India.

III

In eighteenth century Bengal, as everywhere, a system of transit duties prevailed regulating its internal trade. But the East India Company had secured exemption from the duties for their import and export traffic by a royal 'firman'. The Company's goods escaped toll-free on the production of a 'dastak' or free pass signed by the English President or by the heads of the English factories. The Nawabs of Bengal had conceded this privilege but the Company extended the claim in respect of their private inland trade. The 'dastaks' which had never been designed to cover the local trade of Bengal were grossly abused on a wholesale scale by the agents of the Company. From being exporters and importers merely, the Company had engaged in the inland trade of Bengal on their own account. An English 'dastak', or a boat bearing an English flag was not to be questioned by the Nawab's functionaries. This brought the

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Company into unfair competition with the traders of Bengal, for, while the Company's merchandise passed duty-free, the native merchants paid heavy transit duties. Such differentiation, it is needless to say, led to the rapid monopoly of internal traffic by the Company and wrought the ruin of indigenous trade.

The Directors themselves were fully alive to the Company's preposterous claim. In their letter of instructions to Clive dated April 26, 1765 they wrote: 'Treaties of commerce are understood to be for the mutual benefit of the contracting parties. Is it then possible to suppose that the court of Delhi, by conferring the privilege of trading free of customs, could mean an inland trade in the commodities of their own country, at that period unpractised and unthought of by the English, to the detriment of their revenues and the ruin of their own merchants? We do not find such a construction was ever heard of, until our own servants first invented it, and afterwards supported it by violence.'

Harry Verelst who afterwards became Governor of Bengal protested that 'a trade was carried on without payment of duties, in the prosecution of which infinite oppressions were committed.' To Governor Vansittart Nawab

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Mir Kassim bitterly complained that his authority was set at naught in every district of his government by the English chiefs, Gomasthas and agents who acted as 'Collectors, Renters, Zamindars, and Taalookdars.' And 'every man with a Company's Dustuck in his hand regards himself as not less than the Company.'

Of the oppressions mentioned by Verelst here is from the pen of the Nawab of Bengal. 'They (the Company's Gomastahs) forcibly take away the goods and commodities of the Reiat, merchants, etc., for a fourth part of their value; and by ways of violence and oppressions they oblige the Reiat, etc., to give five rupees for goods which are worth but one rupee..... So that by means of these oppressions, and my being deprived of my duties, I suffer a yearly loss of nearly twenty-five lakhs of Rupees'¹ Sergeant Brego writes that every Gomastah 'immediately looks upon himself as sufficient to force every inhabitant either to buy his goods or sell him theirs; and on refusal (in case of non-capacity) a flogging or confinement immediately ensues. This is not sufficient even when willing, but a second force is made use of, which is to engross the different branches of trade to

1 Cf. R. C. Dutt.

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themselves and not to suffer any person to 'buy or sell the articles they trade in; and if the country people do it, then a repetition of their authority is put in practice.'¹ This was not all. The Collector of Dacca remonstrated to the Governor of Bengal: 'The Gomastahs of Luckypoor and Dacca factories oblige the merchants, &c., to take tobacco, cotton, iron and sundry other things, at a price exceeding that of the bazaar, and then extort the money from them by force..... By these proceedings the Aurungs and other places are ruined.'²

It is to the ever-lasting credit of Warren Hastings, the future Governor-General, that he was among the few servants of the Company whose supreme sense of justice was not outweighed by selfish commercial interests. Here is from his letter to Henry Vansittart, April 25, 1762: 'I beg leave to lay before you a grievance which calls loudly for redress.I mean the oppressions committed under the sanction of the English name, and through the want of spirit in the Nawab's subjects to oppose them. This evil, I am well assured, is not confined to our dependants alone, but is practised all over the country by people falsely assuming the habits of our sepoys, or calling themselves our GOMASTAS.....'

1 Cf. R. C. Dutt.

2 Ibid

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I have been surprised to meet with several English flags flying in places which I have passed; and on the river I do not believe that I passed a boat without one. By whatever title they have been assumed, I am sure their frequency can bode no good to the Nawab's revenues, to the quiet of the country, or the honour of our nation; but evidently tends to lessen each of them.'¹

On this gross subversion of 'one of the commonest rights of all human societies,' Romesh Chunder Dutt remarks: 'History, perhaps, does not record another instance of foreign merchants asserting such far-reaching claims by the force of arms, in order to divert into their own hands virtually the entire trade of a great and populous country.' A great Englishman, Herbert Spencer, wrote: 'Imagine how black must have been their deeds, when even the Directors of the Company admitted that 'the vast fortunes acquired in the inland trade have been obtained by a scene of the most tyrannical and oppressive conduct that was ever known in any age or country'. Conceive the atrocious state of society described by Vansittart, who tells us that the English compelled the natives to buy or sell at just what rates they pleased, on pain of flogging or confinement.'

1 Cf. R. C. Dutt.

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Such was the ruin of the trade of Bengal. The authorities speak for themselves: comment is superfluous.

The ^{harrowing} tale of how the Company and their agents, in their anxiety for monopoly, wrought the ruin of our manufactures is common stock. The historic testimony of William Bolts, the English merchant in the Company's employ, deserves to be quoted *in extenso*. '(P. 191.) and it may with truth be now said, that the whole inland trade of the country, as at present conducted, and that of the Company's investment for Europe in a more peculiar degree, has been one continued scene of oppression: the baneful effects of which are severely felt by every weaver and manufacturer in the country, every article produced being made a monopoly; in which the English, with their BANYANS and black GOMASTAS, arbitrarily decide what quantities of goods each manufacturer shall deliver and the PRICES he shall receive for them.'

'(P. 73) Inconceivable oppressions and hardships have been practised towards the poor manufacturers and workmen of the Country, who are, in fact, monopolized by the Company as so many slaves..... Various and innumerable are the methods of oppressing the poor weavers, which are duly practised

by the Company's agents and GOMASTAS in the country; such as by fines, imprisonments, floggings, forcing bonds from them, etc., by which the number of weavers in the country has been greatly decreased. The natural consequences whereof have been, the scarcity, dearness, and debasement of the manufactures as well as a great diminution of the revenues.'

'(P. 192.) A number of these weavers are generally also registered in the books of the Company's GOMASTAS, and not permitted to work for any others; being transferred from one to another as so many slaves, subject to the tyranny and roguery of every succeeding GOMASTA. The roguery practised in this department is beyond imagination, but all terminates in the defrauding of the poor weaver; for the prices which the Company's GOMASTAS fix upon the goods, are in all places at least fifteen per cent, and in some even forty per cent less than the goods so manufactured would sell for in the public Bazar, or market, upon a free sale. The weaver, therefore, desirous of obtaining the just price of his labour, frequently attempts to sell his cloth privately to others, particularly to the Dutch and French GOMASTAS who are always ready to receive it. This occasions

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the English Company's GOMASTA to set his PEONS over the weaver to watch him, and not infrequently to cut the piece out of the loom when nearly finished'.¹ ... 'Weavers, also, upon their inability to perform such agreements as have been forced upon them by the Company's agents, universally known in Bengal by the name of Mutchulcahs, have had their goods seized and sold on the spot to make good the deficiency; and the winders of raw silk, called Nagoads, have been treated also with such injustice, *that instances have been known of their cutting off their thumbs to prevent their being forced to wind silk.*'

Under such an oppressive system of monopoly and coercion no industry can flourish. The Directors had been specific in their condemnation of their servants' practices but their instructions availed little indeed in weaning their functionaries from the double path of monopoly and oppression. But it was reserved to the Directorate to commit a grosser injustice. The silks of Bengal had been exported in large quantities to England to the utter discomfort of British weavers in silk. The political authority obtained by the Company (the battle of Plassey had been fought and won) was made to subserve British

¹ Cf Ramsay Muir.

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industrial interests to the deliberate suppression of indigenous manufactures. British silk industry was to flourish at any cost, even if it involved the relentless sacrifice of its innocent sister of Bengal. On March 17, 1769 the Company in their letter of instructions to Bengal made it explicit that the production of raw silk only should be promoted while the manufacture of finished fabrics was to be definitely discouraged. The winders of silk, moreover, were prohibited from working in their houses but were required to enlist their services in the factories of the Company.

In 1783 the Select Committee of the House of Commons on Administration of Justice in India remarked with significance: 'This letter contains a perfect plan of policy, both of compulsion and encouragement, which must in a very considerable degree operate destructively to the manufactures of Bengal. Its effects must be (so far as it could operate without being eluded) to change the whole face of that industrial country, in order to render it a field of the produce of crude materials subservient to the manufactures of Great Britain.'

The oppression of the weavers was not merely recommended and practised, it was

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legalised. Regulation XXXI of 1793 laid it down that any weaver to whom the Company had advanced money 'shall on no account give to any other persons whatever, European or Native, either the labour or the produce engaged to the Company': in contravention of which the weaver 'shall be liable to be prosecuted in the Dewani Adalat' and 'weavers possessed of more than one loom, and entertaining one or more workmen, shall be subject to a penalty of 35 per cent on the stipulated price of every piece of cloth that they may fail to deliver according to the written agreement.' The merchants of London made it clear that 'so long as the 31st Regulation of the Bengal Government, of the year 1793, remains unrepealed, the East India Company avails itself of its political authority to increase its mercantile profits..... By it (the Regulation) no persons in balance to the Company, or engaged in any way in the provision of their investment, can with-draw from their employ; they cannot work for others or for themselves.'¹

It remains to narrate the disastrous tale of the Company's Investments. Governor Verelst wrote: 'Each of the European Companies by means of money taken up in the

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country, have greatly enlarged their annual Investments, without adding a rupee to the riches of the province.' Over one-third of the annual revenues of Bengal was ear-marked for the purchase of goods for exportation to England without any commercial return. This was called the Company's Investment. The Directors forwarded to the Board of Trade in India the order of requisite exportation goods which were apportioned by the Commercial Residents among the several factories. Ostensibly, the weavers were advanced sums of money and agreements entered into for the delivery of goods. But the agreements were far from being mutual or voluntary. Under cover of the Regulation innumerable oppressions were committed by the Company's agents, such as forcing the services of the weavers by outright intimidation; harassing them to expedite the delivery of goods; such as fines and seizure of utensils (Munro). The unfortunate weavers seldom got out of their pernicious liability and whole families were enslaved by this practice.¹

In his reply to the questionnaire issued by the Board of Control of the East India Company, Mr. Richards brought out as substantiated by the Diary of the Commercial

1 R. C. Dutt

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Board at Surat ' that the Surat investment was provided under the most rigorous and oppressive system of coercion; that the weavers were compelled to enter into engagements and to work for the Company, contrary to their own interests, and of course to their own inclinations, that the object of the commercial resident was as he himself observed, to establish and maintain the complete monopoly, which the Company had so sanguinely in view, of the whole of the piece-goods trade at reduced or prescribed prices; that in the prosecution of this object compulsion and punishment were carried to such a height, as to induce several weavers to quit the profession;..... that to monopolize the piece-goods trade for the Company at low rates. it was a systematic object of the resident to keep the weavers always under advance from the Company, to prevent their engaging with other traders; . . and that on no account should piece-goods be sold to other persons.' 'A similar course of arbitrary proceeding' was the practice of the commercial factories in the presidency of Madras. 1

The following table² of the Prime Costs of

1 Cf Major Bask

2 Cf R C Dutt

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the Company's Investments speaks for itself:—

Year	Prime Cost of Investment, India.	Year.	Prime Cost of Investment, India
1793-4	£1,220,106	1803-4	1,187,07
1794-5	1,288,059	1804-5	1,088,700
1795-6	1,821,512	1805-6	1,335,460
1796-7	1,708,379	1806-7	986,310
1797-8	1,025,204	1807-8	887,119
1798-9	2,019,265	1808-9	1,013,740
1799-1800	1,665,689	1809-10	1,240,315
1800-1	2,013,975	1810-11	963,429
1801-2	1,425,168	1811-12	1,110,909
1802-3	1,133,526		
Total of nineteen years.			25,134,672
Annual average			1,322,877

The Select Committee of the House of Commons in their report of 1813 had brought to light these and such like iniquitous practices but Parliament was loath to stop the Company's Investments. On the other hand it was unequivocally sactioned that 'the whole or part of any surplus that may remain' of the rents, revenues, profits etc. 'shall be applied to the provision of the Company's Investments in India.'

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IV

The Charter of the East India Company came for renewal in 1813 when a Select Committee of the House of Commons conducted an exhaustive inquiry into Indian affairs. The debates in Parliament witnessed the abundant English concern in Indian trade. This interest, however, was not wholly without cause. By 1813 Napoleon Bonaparte had closed the continental ports to English merchandise. British commerce had fallen and British merchants clamoured for a new market for their wares. The Company's unprecedented gains in their newly acquired political-commercial colony of India had aroused great interest and much jealousy. British traders with one voice insisted on the opening of the Indian trade. A number of witnesses, with a remarkable knowledge of Indian affairs, like Warren Hastings, Sir John Malcolm and Thomas Munro were examined by the Select Committee concerning the fitness of India as a dumping ground for British manufactures. A series of famines lasting for over fifty years had struck India hard. In 1813 Bombay was cowering beneath a desolating famine and in Madras and Bengal the industries had marked a steady decline. It was then that England sought the Indian market for its wares.

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The question asked of Warren Hastings was typical of the Company's questionnaire. He was asked: 'From your knowledge of the Indian character and habits, are you able to speak to the probability of a demand for European commodities by the population of India, for their own use?' To which Hastings replied that 'the poor in India may be said to have no wants. Their wants are confined to their dwellings, to their food, and to a scanty portion of clothing, all of which they can have from the soil that they tread upon.' Sir John Malcolm, afterwards Governor of Bombay, did not think that the Indians were likely to become consumers of European articles lacking the means by which to purchase them, if they required them at all from their simple habits of life. Lord Teignmouth was not aware of 'any manufactures in this country that the natives would be likely to purchase in any considerable degree.' Among the causes 'which preclude the extension of the consumption of European articles in India' Thomas Munro ranked first 'the excellence of their (Indians') own manufactures'. The clothing of the Indian, Munro deposed, 'is all the manufacture of his own country. We cannot supply him, because while he can get it, not only better, but cheaper, at home,

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it is impossible that we can enter into competition in the market.' In regard to woollen manufactures the witness said: 'The natives have already coarse woollens of their own, which answer all the purposes for which they require them better than those of England do.' Sir Thomas had used an Indian shawl for seven years and found it exceedingly durable: of the imitation makes of Paisley he said, 'I have never seen an European shawl that I would use, even if it were given to me as a present.'

So spoke four illustrious administrators of India but their evidence availed little indeed. Notwithstanding, the industrial products of Britain were forced into India to the ruin of our manufacturers. And the contemporary dogma of '*Laissez faire*' was harnessed to the service of British industrial expansion. While the rest of Europe lay leagues industrially behind, England had by what is known as the 'Industrial Revolution' entirely transformed her means of production. The utilisation of labour-saving machinery culminated in an enormous industrial output demanding an expanding overseas market. The little island of teeming manufacturers thirsted for raw produce and scrambled for colonial markets. The virtue was



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made out of necessity and the doctrine of territorial division of labour linking all the world in one co-operative industrial whole was propagated by the Manchester school of English economists. The nations of the world were thus complementary units in the international economic structure and mutually antagonistic trade restrictions were, therefore, clearly illogical. The British Parliament proclaimed Free Trade, indeed, but it was an odd sort of Free Trade that as it applied to India. As Montgomery Martin justly observed before the Commons Committee of 1840 'the cry that has taken place for free trade with India, has been a free trade from this country, not a free trade between India and this country.' The industrial produce of Britain was doubtless 'free' to enter India but England's doors themselves were barred by statute against our manufactures.

In England in the eighteenth century it was 'penal for any woman to wear a dress made of Indian calico'. The immense textile imports into England of Indian calicoes, muslins and chintzes had seriously alarmed British manufacturers and in 1700 and in 1721 Acts of Parliament were passed absolutely prohibiting the employment of calicoes, printed or dyed.

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While openly advocating Free Trade the British Government virtually excluded Indian products from her shores by an offensive system of prohibitive tariffs. Before the Commons Committee of 1813 John Ranking¹ deposed that the duty on calicoes was £3, 6s. 8d. per cent upon importation, with a further duty per cent of £68, 6s. 8d. if used for home consumption. On muslins there was a 10 per cent importation duty and a £27, 6s. 8d. duty per cent on home consumption. The coloured calicoes were prohibited from use in England being allowed to be exported merely; on importation they paid a duty of £3, 6s. 8d. per cent. To crown all, John Ranking said, there was a new duty of 20 per cent imposed on the consolidated duties.

The following tables¹ represent the duties imposed on the import into England of Indian manufactures (1812-32).

	1812	1824	1832
	Per cent on Value	Per cent on Value	Per cent on Value
Ornamental cane work	71	50	30
Muslins	... 27½	37½	10
Calicoes	... 71½	67½	10
Other cotton manufactures	... 27½	50	20
Goat's wool shawls	... 71	67½	30
Lacquered ware	... 71	62½	30
Mats	... 68½	50	20

¹ Cf. B. G. Dutt.

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	1812	1824	1832
Raw silk.	£2, 13s. 4d. on value plus 4s. per lb.	4s. per lb.	1d. per lb.
Silk manufactures ...	Prohibited	Prohibited	20 per cent on value.
Taffatees or other ...	Prohibited	Prohibited	30 per cent on value.
plain or figured silks	Prohibited	Prohibited	20 per cent on value.
Manufactures of silk ...			£1. 12s. per cwt.
Sugar (cost price about 1£ per cwt)	£1, 13s. per cwt.	£3, 3s. per cwt.	15s. per gallon.
Spirits (Arrack) ...	1s. 8d per gallon plus 19s. 1½d. excise duty	2s. 1d. per gallon plus 17s. 0½d. excise duty	
Cotton wool ...	16s. 11d. per 100 lbs.	6 per cent.	20 per cent.

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I reproduce below the emphatic verdict of Horace Hayman Wilson, the impartial historian of India: 'It is also a melancholy instance of the wrong done to India by the country on which she has become dependent. It was stated in evidence that the cotton and silk goods of India up to the period could be sold for a profit in the British market at a price from 50 to 60 per cent lower than those fabricated in England. It consequently became necessary to protect the latter by duties of 70 and 80 per cent on their value or by positive prohibition. Had this not been the case, had not such prohibitory duties and decrees existed, the mills of Paisley and Manchester would have been stopped in their outset, and could scarcely have been again set in motion, even by the power of steam. They were created by the sacrifice of the Indian manufacture. Had India been independent, she would have retaliated, would have imposed prohibitive duties upon British goods, and would thus have preserved her own productive industry from annihilation. This act of self-defence was not permitted her; she was at the mercy of the stranger. British goods were forced upon her without paying any duty, and the foreign manufacturer employed the arm of political injustice to keep down and ultimately strangle

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a competitor with whom he could not have contended on equal terms.'

V

I have narrated the iniquitous tale of the wholesale abuse of commercial concessions by the East India Company. One act of self-defence was left to the Nawab of Bengal—to abolish the Inland Duties altogether and secure equal trading opportunities for his merchants with the English. Mir Kasim was a clear-sighted despot and he did it albeit to his ruin. Even this righteous exercise of the Nawab's prerogative was repugnant to the Calcutta Board and with the memorable exception of Vansittart and Warren Hastings, the Board were unanimous in their condemnation of the Nawab's decree. The Nawab's 'sanad' was deemed to be highly detrimental to the Company's trade, as being, moreover, a step which he 'as 'suba' of Bengal has no authority to do without permission from the Mogul' and tantamount to breach of faith. 'The narrow-sighted selfishness of commercial cupidity' in the memorable words of H. H. Wilson, rendered the members of the Council 'obstinately inaccessible to the plainest dictates of reason, justice and policy.' It must be said,

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however, to the everlasting credit of the noble dissentients that they remonstrated that it was 'not to be expected the Nawab will join with us, in endeavouring to deprive every merchant of the country of the means of carrying on their business' But the plainest dictates of reason and justice be what they will, the Nawab paid dearly for his action. Mir Kasim was defeated and deposed in 1763 and Mir Jaffar reinstated in his stead.

The ineffectual reigns of Mir Jaffar and Nazimuddin that followed proved to be the mute registers to the Company's will and by 1765 the Company were the acknowledged masters of Bengal. It is small wonder that under the Company's rule the system of Inland Duties became more obnoxious than ever. The native system of Transit Duties had been of the nature of a toll charged per animal-load or vehicle-load and not *ad valorem*. In general the duties were light and in proportion to the distance of carriage, being paid at every fiftieth or sixtieth mile. In the collection of duties no forms were insisted on, no oppressions committed. The Company, however, acted in total disregard of native practice. Under its rule, the duty for the entire transit was collected all at once and wholly at the commencement, not as might be supposed

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on the basis of the previous system for shorter or longer distances, but instead on the aggregate of duties levied for the greatest distances. The 'rowannah' or pass, granted to the merchant on payment of the consolidated duty, was the cause of much menace and annoyance. A pass availed for one year only and was to be renewed on expiry by payment of half a rupee per cent if any of the merchandise remained unsold. But the renewal was by no means easy or expeditious. The difficulty of establishing the identity of goods held over (which was a condition requisite to the renewal of the 'rowannah') and the inordinate delay caused in inquiry at the custom-house entailed such a loss of time that the merchants preferred to pay the duty over again rather than wait, choosing the 'less evil.' To add, the establishment of 'chowkies' or search-houses for the prevention of smuggling led eventually to gross injustice. These were the repositories of extensive powers, to search to the fullest extent and ascertain the quantity and value of goods in transit. But these powers were largely abused: travellers were harassed and even the honour of women passing through them was not without danger. The effect of such practices upon large-scale manufactures was to compel

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the performance of several different processes in the same locality, disregardful of its suitability in respect of efficiency, much to the detriment of the quality of the output. The system of duties was a strong deterrent to the passage of the raw-material to be worked up and finished at adequate stages of its manufacture. Still, the crude material has to be carried some distance at least to the place of manufacture and this involved a double duty, both on the raw produce and on the finished article. Thus shawls came in for a double duty of twenty per cent, leather was taxed thrice upto fifteen per cent and cotton, before manufacture, four times, altogether seventeen and a half per cent.¹ This 'mischief of our Inland Customs' in the phrase of Holt Mackenzie (he was Territorial Secretary in 1825) was not remedied despite his memorandum of protest. The abolition of the duties, according to Mackenzie's estimate, meant the immediate sacrifice of a revenue of thirty three lakhs and it was no small sum.

The famous report of Sir Charles Trevelyan on Transit Duties (undertaken at the instance of Lord William Bentinck) is as a luminous ray across this dark period of commercial

1 The Hon'ble Frederick Shore quoted by Major Passu.

oppression. It was of it that Lord Macaulay remarked: 'Accustomed as I have been to public affairs, I never read an abler state paper, and I do not believe that there is, I will not say in India, but in England, another man of twenty-seven who could have written it.' Sir Charles set forth in the most vivid detail every species of oppression that was committed by the Customs officers. No less than two hundred and thirty-five articles of personal and domestic use were subject to Inland Duties. Lord Ellenborough in England, afterwards Governor-General of India, reinforced in unequivocal language the observations of the Trevelyan Report. But the Court of Directors were loath to act though 'well aware of the opinion entertained by the home authorities of the injurious effects which attend the levying of this impost.'

I may not detail the history of transit Duties to their successive abolition in the several provinces of India. It will suffice to mention here that Bengal itself was rid of the plague in March 1836 while in the province of Madras they survived so late as 1844. Redress did come at last but it was after the trade and manufactures of India were effectively crushed out.

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While such was the system of Inland Duties practised in India the preferential tariffs charged on British manufactures were no less injurious to Indian trade and industry. Before the Select Committee of the House of Commons presided over by Lord Seymour, J. C. Melville deposed that British cotton and silk stuffs on importation into India paid a duty of $3\frac{1}{2}$ per cent and British woollen goods a duty of 1 per cent merely. But Indian goods on importation into England paid a duty of 10 per cent, Indian silk goods a duty of 20 per cent while Indian woollens came in for a duty of 30 per cent. The result was obvious. Montgomery Martin, another witness who appeared before the Committee, said that in 1815 Indian cotton goods exported from India were of the value of £1,300,000; in 1832 the figure for exports had dwindled down to £100,000. On the other hand, British cotton goods imported into India were of the value of £26,300 in 1815; in 1832 they were over £400,000 in value. Commenting on this striking decline in the export trade of India Montgomery Martin observes: 'We have during the period of a quarter of a century compelled the Indian territories to receive our manufactures; our woollens, duty free, our cottons at 2 per cent, and other articles in

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proportion; while we have continued during that period to levy almost prohibitory duties, or duties varying from 10 to 20, 30, 50, 100, 500, and 1000 per cent upon articles, the produce from our territories... ..I do not consider that it has been in the fair course of trade; I think it has been the power of the stronger exercised over the weaker.'¹ Mr. Shore expressed himself more strongly. He said: 'This supercession of the native for British manufactures is often quoted as a splendid instance of the triumph of British skill. It is a much stronger instance of English tyranny, and how India has been impoverished by the most vexatious system of of customs and duties imposed for the avowed object of *favouring the mother country*,':

The accompanying table gives the duties levied in 1852 on some of the principal articles imported into India.³

1 Cf. R C Dutt

2 Ibid

3 Ibid

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DUTIES LEVIED ON IMPORTED ARTICLES

Articles.	Import duty.
Books, British ...	Free.
Books, Foreign ...	3 per cent.
Coffee ...	7½ per cent.
Cotton and silk piece goods, British ...	5 per cent.
Cotton and silk piece goods, Foreign ...	10 per cent.
Cotton thread, twist, and yarn, British	3½ per cent.
Cotton thread, twist, and yarn, Foreign	7 per cent.
Horses and other animals ...	Free.
Marine stores, British	5 per cent.
Marine stores, Foreign	10 per cent.
Metals, British ...	5 per cent.
Metals, Foreign ...	10 per cent.
Beer, ale, and similar fermented liquors	5 per cent.
Salt ...	5s. per maund (82 lbs.) in Bengal. 6s. per maund in Madras.
Spirits ...	3s. per Imperial Gallon London proof.
Tea ...	10 per cent.
Wines and Liquors	2s. per Imperial Gallon.
Woollens, British ...	5 per cent.
Woollens, Foreign ...	10 per cent.
Manufactured articles	5 per cent.
Articles not named	3½ per cent.

VI

It would be natural to suppose that the gradual extension of British dominion in India furnished the successors to the aristocratic nobility whose enlightened patronage had done so much to foster the indigenous handicrafts. The descendants of the old nobility being divested of political authority had retired to the villages and become landed proprietors. They ceased to count as an effective factor in the demand for artistic manufactures. The advent of British rule brought two classes to the fore—the European officials and the educated Indian professional middle class. The European demand pulled in opposite directions with unequal intensity. Obviously, the European in India preferred the products of his home across the seas to articles of native make. The European tourist, on the other hand, was anxious to carry home souvenirs and ornamental trifles at the cheapest possible price. Indiscreet European patronage, writes Professor Gadgil, 'was lowering the standard all round'. The European demand progressively paved the way for artistic decline as the agents in India insisted continually on cheap and standardised production. *The imposition of European patterns on*

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the Indian craftsmen was a distinct handicap working to destroy all originality in artistic design. The effects of European patronage, I have said in a former chapter, were most markedly felt in the carpet and the shawl industries.

The Indian *bourgeoisie*, however, set its back definitely against native products. Even at the dawn of the present century the use of indigenous articles was deemed a crude barbarity. Mr. Blunt¹ puts it exceedingly well when he says : ' With the spread of a pseudo-western culture, the Indian gentleman prefers to live in what he considers to be European style. The votaries of this style ignore the highly artistic industries of India and show a marked weakness for all that would be considered intensely vulgar by the very persons whom they are so anxious to imitate.' This change in fashion was pre-eminently at work in respect of the textile manufactures. Mr. Edgar Thurston² writes : ' As in England, so in Southern India, fashion plays an important role in connection with native dress, both male and female. The assumption of the turband by the Autochthonous Todas of the Nilgiris, the replacement of the tribal turband of the Badagas

1 Cf. Balkrishna.

2 Cf. N M Pal.

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by knitted night cap of bright red or orange blue, the pork-pie cap, beloved by native student, and oft-times ornamented with enormous knitted flower pattern; the unstarched white shirt, patent leather boots, and white socks of the Bengali Babu clerk, the adoption by native cricketeers of machine-made-coloured blazers, as evil in colour contrast as those of many a house eleven at an English public school, are but a few examples of modern change in native male attire for the worse.' Mr. Cookson¹ notes concerning the silk industry of the Punjab: 'To wear silk is not the fashion it used to be in Sikh times or to the extent it still is in the Native States. European cotton goods, printed calicoes and cheap broadcloths have turned silken garments out of the field.' It is unfortunately true that the European officials themselves took no pains to discourage this absurdly hybrid style. On the contrary, they even promoted it by tacit tolerance. Mr. Kipling² writes: 'No sumptuary regulation to restrain extravagance in gilded shoes, and enforce the use of plain black leather could be half so potent as the unwritten ordinance, which permits an oriental to retain a pair of patent leather boots on stockinged feet and

1 Of D. R. Gadgil.

2 Ibid

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requires him to doff shoes of native make, when in the presence of a superior.'

I have referred already to the operation of the Arms Act following British rule in the extinction of the indigenous manufacture of weapons of warfare. The most hit industry was the damascening and inlaying of swords and shields, an industry which flourished so late as 1850 in Cutch, Sind and the Punjab.¹

Professor Gadgil points to the supercession of native industrial guilds and corporations by British authority as a factor of considerable magnitude in our industrial decline. The weakening of the guilds resulted inevitably in the adulteration of material, bad craftsmanship and the deterioration in the artistic and commercial value of the wares. I cannot determine the intensity of the operation of this factor.

VII

By far the most important factor making for our industrial decay was the advent of machine-made goods following the Industrial Revolution in England. It falls without the scope of this work to detail the successive

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happenings of the Revolution itself. The introduction of steam as a new force in human economy with its inevitable reaction on transport, on the metal industries, on the textiles and on the chemical industries entirely transformed the industrial output. The utilisation of labour-saving machinery brought new industrial problems to the fore connected with industrial organisation, large-scale capitalistic enterprise, the acquisition of overseas markets etc. Thus Great Britain was busy manufacturing the textiles to clothe the tropical races abroad by a strange irony and India which once supplied all Europe with her cloth was made to import the makes of Manchester and Paisley. In this connection it is important to remember that it was India which virtually set the Industrial Revolution afoot in England. For, writes Brooks-Adams: 'Very soon after Plassey, the Bengal plunder began to arrive in London, and the effect appears to have been instantaneous, for all the authorities agree that the 'industrial revolution', the event which has divided the nineteenth century from all antecedent time began, with the year 1760. Prior to 1760, according to Baines, the machinery used for spinning cotton in Lancashire was almost as simple as in India; while about 1750 the English iron

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industry was in full decline..... 'Plassey was fought in 1757 and probably nothing has ever equalled the rapidity of the change which followed. In 1760 the flying shuttle appeared, and coal began to replace wood in smelting. In 1764 Hargreaves invented the spinning-jenny, in 1776 Crompton contrived the mule, in 1785 Cartwright patented the power-loom, and, chief of all, in 1768 Watt matured the steam engine, the most perfect of all vents of centralising energy. But, though these machines served as outlets for the accelerating movement of the time they did not cause that acceleration. In themselves inventions are passive, many of the most important having lain dormant for centuries, waiting for a sufficient store of force to have accumulated to set them working. That store must always take the shape of money, and money not hoarded, but in motion. Before the influx of the Indian treasure, and the expansion of credit which followed, no force sufficient for this purpose existed; and had Watt lived fifty years earlier, he and his invention must have perished together.'

These are important words and serve to bring out the two-fold damage that was done to India. The wealth of Bengal then set the mills going in England and the stuff turned

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out by the mills at a wonderfully cheap cost strangled the Indian producer while the arm of political authority cleared the way for British imports by a differential tariff policy. In the face of the competition of machine-made goods which came on them with the suddenness of a catastrophe (for the Industrial Revolution had been a fortuitous accident) the Indian artisans lacking the means and the opportunities to adjust themselves to the new order were entirely swept off their feet. In England itself this sudden transition was painful at first; the weavers petitioned to Parliament and 'begged to be sent to Canada. They proposed that the terrible power-loom should be restrained by law; and when that was denied them, they rose in their despair and lawlessly overthrew the machines which were devouring the bread of their children.' But the industrial maladjustment in England was temporary: if the machinery displaced labour it made amends by absorbing it. And ere long the immense opportunities afforded by large-scale production directed to expanding markets overseas had created a prosperous industrial middle class whose ranks were filled from the flourishing artisans. In our country, however, no such thing happened. It was not till the middle of the nineteenth

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century that Indian industry was 'mechanised' on any considerable scale and when it was done but a fraction of the displaced artisans found employment in the factories. The greater part flocked to the villages and pressed upon the land. This was inevitable in the absence of alternative occupations which could facilitate the transfer of industrial labour. But the resort to agriculture was most unfortunate as it speedily fostered a landless labouring class who shuffled about the margin of starvation. Agriculture has been well called the Cinderella of world economy. Add to this in India the visitations of famines.

But this cause of the competition of machine-made goods is apt to be overdone by the apologists of our industrial decline who are anxious to shift the burden of decay entirely on the shoulders of the Industrial Revolution. It was certainly not till 1833 that British goods were imported on an extensive scale into India and it was not till after 1853 that the imported goods were made available to the remotest inhabitant by the improved facilities of transport. I have said that the products of England failed to reach, despite their cheapness, two classes in India, the aristocratic nobility and the poorer classes. That was because Manchester had not attained

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to the artistic excellence of indigenous makes which still enjoyed the conventional patronage of the nobility while British textiles could not be manufactured cheap enough to undersell the native coarse-cloth which the poorer sections preferred to wear.

It is futile to speculate on the course of Indian industry if it had not been for the competition due to machine-made products. It will be urged that in a progressive world economical and scientific processes must be introduced sooner or later. It will suffice to mention here that it made all the difference that the products of mechanised industry were dumped by a foreign manufacturer who reaped all the profits, and what was worse, dislocated indigenous industry. Ofcourse, it was not to the advantage of the British industrialist to introduce his mechanical skill into India early enough. It were tantamount to giving up trade secrets and the tables might have been turned against him. I shall take up the more vital question of the mechanisation of Indian industry itself in a later chapter.

VIII

The Railway both directly and indirectly contributed to the decline of Indian industries.

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It was in 1853 that Lord Dalhousie wrote his historic minute on Railways. He said: 'Great tracts are teeming with produce they cannot dispose of. Others are scantily bearing what they would carry in abundance, if only it could be conveyed whither it is needed. England is calling aloud for the cotton which India does already produce in some degree, and would produce sufficient in quality, and plentiful in quantity, if only there were provided the fitting means of conveyance for it from distant plains to the several ports adopted for its shipment. Every increase of facilities for trade has been attended, as we have seen, with an increased demand for articles of European produce in the most distant markets of India; and we have yet to learn the extent and value of the interchange which may be established with people beyond our present frontier, and which is yearly and rapidly increasing. Ships from every part of the world crowd our ports in search of produce which we have, or could obtain in the interior, but which at present we cannot profitably fetch thence; and new markets are opening to us on this side of the globe under circumstances which defy the foresight of the wisest to estimate their probable value or calculate their future extent.'

Memorable words these and significant to the letter. Lord Dalhousie has deserved

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well for the incalculable impetus which his efforts gave to the 'vast increase of productive industry.' His biographer, Sir W. W. Hunter, notes with satisfaction that imports of cotton goods and twists into India rose from 3 millions sterling in 1848 to 6½ millions in 1856, while during the eight years of his rule the export of raw cotton more than doubled itself from 1½ millions to nearly 3½ millions. That is a splendid record for the young imperialist. The avowed object of his minute was the rapid extension of British trade and industry. England was calling aloud for Indian cotton as she called louder for the Indian market after the cotton was made into cloth. India was to be made, in Montgomery Martin's striking phrase, 'the agricultural farm of England.'

The discussion of the economics of Indian railway construction itself falls without the scope of my inquiry. Why the auxiliary development of our iron and steel industries was not taken up by the Government as it should properly have been done; why British capital, only too willing for investment, was called in at exorbitant rates of interest for railway outlay—these are questions which have never been adequately answered.

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The British manufacturer had, as I have said, a two-fold interest in our railway construction. Railways were the channels for the carriage of the raw produce to the ports whence it was shipped to the English manufactories; they were likewise the channels for the transportation of the finished article when it arrived at the ports. That is why the British Parliament was continually insistent upon the multiplication of Indian railways despite the enormous loss to the country's finances.

The direct consequence of the railway was the destruction of indigenous industries by facilitating the carriage of imported goods into the remotest interior. The native artisans were driven off the field by a competitor which extended its tentacles to the farthest corners of the country. It is little solace that some of the craftsmen were absorbed by the railway itself and yet others by the new industries it helped to foster. But they were an insignificant number and the most part pressed more than ever on agriculture. It will be conceded that the advent of the railway augmented the export trade in primary produce. But even this gain to the agriculturist was more apparent than real. It is doubtless true that he received higher prices

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for his produce, but he paid higher rent and employed costlier labour. Besides, the cultivator who took the cash in hand and waived the privilege of possessing a ready store of grain, found himself hard hit in times of famine. And the money melted away in the purchase of just the imported articles which the railway conveyed to his door. Moreover, the large-scale capitalistic enterprise in new industries which the railway brought into being altogether excluded the impoverished Indian manufacturer and the profits of the springing industries went to swell the enormous drain to England.¹

This is not to deny the economic possibilities of railways. But I question the direction of our railway construction. The commonplace vaunt of the risks of pioneer foreign investment, lacking indigenous enterprise, has lost its point. A refined method of annexation, it has been said, is by railway conquest. The fact is that the railways in India merely facilitated the commercial annexation by Britain of a vast sub-continent. The progress of civilization, it will be urged, must sooner or later bring the railway, but it need not have been to facilitate the export of raw produce and the importation of the finished

1. P. N. Bose.

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article, and certainly not by the investment of external capital. A national system of Indian railways constructed by indigenous enterprise would, on the contrary, have developed our industries instead of destroying them. For, the railway marks the beginning of a new industrial era: it creates the metal industries necessary for its upkeep; it diminishes distance as an obstacle to industrial advance; it makes for mobility, both of labour and of produce; it acts as the arteries to the marketable output; in short, it creates a new economy. But the Indian artisans were not made to be the participators in that beneficial era.

Instead, the great displacement of skilled labour had thrown the economic structure entirely out of gear. If new industries had been found to maintain the labour out of employ it might have been different, but the economic disorganisation was so sudden and complete that the bewildered craftsman, lacking the resources for new occupations, fell back upon the soil in the last resort. The Industrial Revolution in England was owing to the operation of indigenous forces: the economic transition had, indeed, been painful, but ere long labour had recovered from the disturbance and found its place in the new equilibrium of industrial forces. The

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capitalist and the labourer merely moved into an enlarged world of immense possibilities.

Contemporary English opinion was not disregarding of the unsuitability of railways to Indian conditions then persisting. Lord Derby¹ had remarked: 'What was wanted in India was not costly lines for rapid travelling laid down in a few parts, but a comparatively inexpensive, though slow, means of communication extended all over India.' And Sir Alfred Chatterton remarks with judgment: 'Roads, railways, telegraphs, the construction of the Suez Canal, and every improvement in the means of transport both by sea and land have contributed to the difficulties, and in many cases, to the ultimate discomfiture of the Indian artisan. The attention of Government has been almost entirely directed to the opening up of the land, to the provision of irrigation; assistance has in more than one case been given directly to the efforts of English manufacturers to exploit Indian markets, whilst the industrious artisan has been left severely alone to combat as best he can the growing difficulties of his position.'

1. Cf. P. P. Pillai.

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IX

The first International Exhibition was held in 1851 and for the first time the excellence of Indian manufactures impressed itself upon the British mind. The Exhibition was not merely the direct incentive to British industrialists to manufacture products for Indian consumption; it was the indirect means whereby they could learn the trade secrets of Indian manufacturers. Dr. John Forbes Royle in whose charge the Indian department of the International Exhibition was placed brought home to the Directorate of the East India Company the urgent necessity of establishing a Museum in London wherein to exhibit Indian manufactures. The Museum was to be set up at the expense of India and nothing was more ideal. The Court of Directors willingly gave their support to the scheme but Dr. Royle did not live long enough to bring his project to fruition. Dr. Watson who was appointed to succeed him describes the scheme thus: 'Specimens of all important Textile Manufactures of India existing in the Stores of the India Museum have been collected in 18 large volumes, of which 20 sets have been prepared, each set being as nearly as possible an exact counterpart of the others. The

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eighteen volumes, forming one set, contain 700 specimens, illustrating in a complete and convenient manner, this branch of Indian Manufactures. The twenty sets are to be distributed in Great Britain and India—thirteen in the former and seven in the latter.¹ But the distribution in India of the seven sets was an after-thought. As Dr. Forbes Watson declares, 'the original intention was that the whole of the twenty sets would be distributed in this country (England). Further consideration, however, points to the expediency of placing a certain number of them in India: Ist, because this course will facilitate those trade operations between the two countries which it is the object of work to promote and encourage; and 2ndly, because it is possible that the collection may be of direct use to the Indian manufacturer.' But the chief advantage, Dr. Watson goes on to say 'which is likely to attend the distribution in India of a certain number of the sets of Textile specimens will, it is believed, arise from the opportunity which will thereby be afforded to the agent in India of directing the attention of his correspondent here (England) to the articles suited to the requirements of his constituents. The motive

¹ Cf. Major Basu

² Ibid

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of the distribution in India is clear therefore. The project would be productive of a two-fold advantage: of educating the British manufacturer in respect of Indian tastes and requirements that he might minister to them accordingly, and secondly of facilitating the direction from India of British textiles intended to meet the Indian demand. Dr. Watson explains: 'To attain to skill in meeting Eastern tastes and Eastern wants will require study and much consideration even when the means of study are supplied; but up to the present time the manufacturer has had no ready opportunity of acquiring a full and correct knowledge of what was wanted.' The seven hundred specimens would, therefore, 'show what the people of India affect and deem suitable in the way of textile fabrics, and if the supply of these is to come from Britain, they must be imitated there. What is wanted, and what is to be copied to meet that want, is thus accessible for study in these museums.'¹ The anxiety to acquire the knowledge of the methods of Indian manufactures is obvious. The vast Indian colony loomed invitingly large in the horizon of the British industrialist waiting to be dumped. This important fact of a dependent colony which could be turned into one

¹ Cf Major Basu

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immense commercial market was realised fully. Dr. Watson wrote: 'About 200 millions of souls form the population of what we commonly speak of as India; and scant though the garments of the vast majority may be, an order to clothe them all would try the resources of the greatest manufacturing nation on Earth. It is clear, therefore, that India is in a position to become a magnificent customer.'¹

Commenting on the distribution of the sets of textile samples Major J. B. Keith² says: 'Everyone knows how jealously trade secrets are guarded. If you went over Messrs. Doulton's pottery works, you would be politely overlooked. Yet under the force of compulsion the Indian workman had to divulge the manner of his bleaching and other trade secrets to Manchester. A costly work was prepared by the India House Department to enable Manchester to take 20 millions a year from the poor of India; copies were gratuitously presented to Chambers of Commerce, and the Indian ryot had to pay for them. This may be political economy, but it is marvellously like something else.'

¹ Cf. Major Basu

² Ibid

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IT is not possible to fix with any amount of certainty the limits to the factors operating towards our industrial decline. And obviously, as our indigenous crafts have not died out wholly though they have arrived in most cases at the verge of extinction. This chapter, therefore, deals rather with the visible effects of our industrial decay than pursues that decay itself to any fixed conclusion. And it is no easy matter to piece any further the tale of our decadent industries from any available statistics as the statistics gradually get mixed up due to the contemporaneous development of mechanised modern industries. I am not concerned in this volume with our modern industrial progress and will not, moreover, set it off against the decay of our time-honoured crafts. It is, indeed, difficult to strike such a balance of economic advantages but the balance certainly must be negative in terms of our national welfare as the spread of western industrial

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methods undoubtedly resulted in the progressive ousting of the skilled Indian labourer. The absorption of indigenous skill by the developing factories was, of course, inconsiderable. The trend of modern Indian industry, indeed, comes up for discussion in the chapter that follows and the only case for mechanisation that I can make out is in respect of the 'key' industries. But I anticipate.

I propose in this chapter to trace the two-fold consequences of our industrial decadence, namely: the progressive ruralisation following urban decline (itself the result of the gradual extinction of our urban crafts) and the increasing dependence upon land and agricultural pressure that necessarily followed.

Mr. H. J. S. Cotton observed: 'Not a year passes in which the Commissioners and district officers do not bring to the notice of the Government that the manufacturing classes from all parts of the country are becoming impoverished..... Agriculture is everywhere expanding at the expense of manufacturing industry.'¹ This is evidenced by the accompanying table which sets out the percentage of the Indian population engaged in Agriculture and Industry for the successive census years.

1 Cf. Balakrishna.

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AGRICULTURE AND INDUSTRY PER CENT.

	1871	1881	1891	1901	1911
Agriculture	56.2	40.4	61.0	61.3	72.5
Industry	13.1	...	15.4	12.0	11.3

It will suffice here to record the remarks of the Indian Census Report for 1911. It says : 'As compared with 1901, the number of landlords and cultivators has risen from 155 to 175 millions. The rate of increase is thus 13 per cent., or double that of the general population..... On the one hand, the rise in price of food grains has made agriculture more profitable, while, on the other, the profits of various artisan classes have been diminished, owing to the growing competition of machine-made goods, both locally manufactured and imported, with the results that these classes show a growing tendency to abandon their traditional occupation in favour of cultivation.....'

An examination of the occupational distribution in the several provinces of India brings out the tendency more emphatically. The accompanying¹ table sets forth the percentage of the provincial population engaged in Agriculture and Industry for the successive decennia beginning from 1871.

1871 1881 1891 1901 1911

Agr. Ind. Agr. Ind. Agr. Ind. Agr. Ind. Agr. Ind.

Bengal	..	36.68	7.03	38.62	7.68	64.2	...	72.44	...	76.26	14.5
Bombay	..	38.32	10.92	40.01	11.22	59.62	21.29	61.16	18.37	68.40	...
Madras	...	31.1	7.72	44.37	12.82	61.39	...	70.67
Punjab	53.6	22.15	54.1	21.7	58.05	19.37	60.1	20.4
U. P.	...	50.0	..	64.12	20.95	61.65	11.4	65.4	14.9	71.6	12.2

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The danger attendant upon this increasing dependence on agricultural land is obvious. The 'Indian Empire' notices that 'a considerable landless class is developing which involves economic danger because the increase has been most marked in districts where the rural population is already congested or in provinces in which there is special liability to periodic famines.'

This tell-tale pressure upon the soil was due in considerable measure to the general depression in urban industries in that it compelled the inevitable migration of industrial labour to agricultural pursuits failing alternative occupations. The once flourishing industrial towns had fallen on evil days. Of Murshidabad, once the capital city of Bengal, Lord Clive had said: 'This city is as extensive, populous and rich as the city of London, with this difference, that there are individuals in the first possessing infinitely greater property than in the last city.' The prosperity of Murshidabad was largely owing to the industry in silks: the Bengal Census Report for 1891 ranks first 'the decay of the silk and indigo industries' among the causes of the 'unprogressive' condition of the district of Murshidabad. Before the Commons Committee of 1833 Sir Charles Trevelyan had lamented that

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'Dacca which was the Manchester of India, has fallen off from a very flourishing town to a very poor and small one, the population marking a phenomenal decline from 150,000 to 30,000.' Sir Robert Peel,¹ commenting on the decay of Dacca, 'once a great and flourishing city, the seat of prosperous manufactures' remarks with vehemence: 'Have the people of that country ruined by our manufactures and subject to heavy fiscal demands, to be met only by the produce of Agricultural labour, have they no paramount claim on us?' In the Punjab also, following the decay of the urban crafts the artisans had departed to the villages. 'The decline of the shawl industry has caused a decrease in Nurpur, and the diversion of the cotton trade has crippled Ferozpur Jhirka in Gurgaon.'

It is with reference to this state of conditions that Justice Ranade spiritedly remarked: 'This Dependency has come to be regarded as a Plantation, growing raw produce to be shipped by British Agents in British Ships, to be worked into Fabrics by British skill and Capital, and to be re-exported to the Dependency by British merchants to their corresponding British Firms in India and

1 Cf. Balakrishna

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elsewhere. The development of steam power and mechanical skill, joined with increased facilities of communication, have lent strength to this tendency of the times, and, as one result of the change, the gradual ruralisation of this great Dependency, and the rapid decadence of Native Manufacture and Trade become distinctly marked.'

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MY task is ended. This chapter is but a sequel, an after-thought and a fitting culmination to the inquiries into our industrial decadence. Such then was the industrial past of India, we tell ourselves, and so did it decay. Can we give it vital growth again? On what lines shall our industrial reconstruction proceed? Are we to take after western examples? Or should we rather entirely break away from modern industrial methods and strike out for ourselves an industrial plan more in keeping with our genius and traditions? These are questions that demand a pressing answer. The past is verily the future written backwards and what we were has an urgent message for what we strive to be. But with this difference that our industrial history becomes the corrective to our future efforts at *resuscitation*. That is the supreme value of all historical studies: it is not, perhaps, that history repeats itself but that the search-light of history discovers the pitfalls of the yet-to-be accomplished future. All things human

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change and in a changing world the things of the past seem absurdly out of joint. Yet the Time Spirit skims but upon the surface of human activities and beneath this apparent mutation there lies the solid mass of unchanging human wants to minister to which is the ultimate end of all industrial effort.

I will develop my thesis in what follows that our industrial future lies in the resuscitation of our decadent industries in the increasing opportunities of employment they afford to our starving millions. It might seem an extreme statement to make but I will presently demonstrate that the revival of our indigenous crafts far from being an economic expedient is an urgent necessity if we at all give a thought to the amelioration of that mass of helpless humanity which constitutes India. It has been remarked with striking wisdom: 'The industrial progress of the country if it is to be of real value, must obviously be in the direction of industries which hold out prospects of employment to large numbers of the working population. Pending the discovery or introduction of new industries, progress must, therefore, tend either to substitute indigenous manufactures for imports of considerable value, or to provide means for manufacturing in the country raw material now exported in

large quantities to be worked up into finished articles elsewhere.'¹ Sir Valentine Chirol exhorts to like effect: 'It is at least equally important for India to save her home industries, and especially her hand-weaving industry, the wholesale destruction of which under the pressure of the Lancashire power loom has thrown so many poor people on to the already over-crowded land.' Mr. E. B. Hewell² writes more vehemently: 'While the governments of Europe have been vying with each other in their efforts to revive the old traditions of craftsman-ship, and while India possesses in the inherited skill of her millions of artisans a source of enormous potential wealth, which is steadily deteriorating mainly from the want of technical knowledge and proper organisation, the only policy of the Anglo-Indian administration has been to encourage the crude barbarities of the factory system from which Europe is now trying to emancipate herself.'

I will begin by answering once for all the plea for the mechanisation of Indian industry. The case for mechanisation is briefly thus:—Modern industrial organisation following in the wake of the rapid strides of scientific

1 Bombay Census Report 1901.

2 Cf. Balakrishna

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discoveries strangles the individual craftsman as he certainly cannot stand the gigantic competition with machinery. The utilisation of labour-saving machinery obviously makes for the economy of human labour as well as for a marvellous multiplication of the output at a hitherto unbelievably cheap price. Only look at the productive output of Great Britain with a population of but four crores as against the productive output of India with a population of almost thirty-five crores ! Shall we cling to the handloom and the crude barbarities of a bygone age while the rest of the world has marched leagues on the way of industrial advance ?

The foregoing argument contains a few economic fallacies. The case for industrial mechanisation in India is based upon an untenable comparison with the industrial countries of the west, more especially with Great Britain. If I may be allowed a small digression the industrial supremacy of England itself was due to that remarkable accident, the Industrial Revolution. I have said while the rest of Europe lay in an almost medieval trance, England in the eighteenth century was quick to grasp the immense opportunities afforded by the scientific inventions. The employment of machinery necessarily resulted

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in an enormous augmentation of the produce which demanded an increasingly expanding market. Then followed the scrambling for markets and the greed of colonisation. The European countries had by now shaken off their sloth and ran the mad race for commercial aggrandisement, splitting up Asia, Africa and the western hemisphere among themselves. In the opening-up of these markets was a secure dumping-ground for their wares and the mills of Manchester were busy turning out the cotton cloth to clothe the tropical races abroad. Here then was the reason for the mechanisation of western industry: the markets were vast, the required turnover was immense and the hands none too many for the stupendous enterprise. The utilisation of labour-saving machinery, therefore, was an economic necessity. Mahatma Gandhi very aptly remarks: 'Mechanisation is good when the hands are too few for the work intended to be accomplished. It is an evil when there are more hands than required for the work, as is the case in India.' The problem with us is not labour-saving machinery but labour-absorbing machinery. The aim of our industrial reconstruction shall certainly not be the economy of labour but the ample provision of industrial occupations to each and all. It

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were a very dearly bought economy of labour, indeed, if our labour-saving machinery released millions of human beings who came back to us for relief from unemployment and starvation. The present day gigantic schemes for poor relief and unemployment relief indicate that there is something wrong with the world's economic system. What is apparently an economic saving in the employment of machinery is obviously a balanced loss in the expenditure on doles. But it must be a positive loss in our country where no such schemes for the amelioration of the poor exist. If according to Gandhiji's estimate every mill-hand displaces roughly ten craftsmen, then certainly 'the cheapest mill-cloth is dearer than the dearest Khadi.'

There is another very cogent objection. It is a common-place of economic experience that the world's production is not being directed toward the end of all production, namely consumption. We produce more than we can consume. One half of the world is continuing the large-scale production of finished commodities in the solemn hope that the other half of it will readily consume the turnover. The theory of value, of price marking the intersection of supply and demand, of supply and demand being mutually

adjustable are the shibboleths of academic economics: in the international market, indeed, supply is hardly calculated to the effective demand; the colossal industrial machine which we have set in motion is impossible to stop at will any more than we can prevent a pent-up volcano from discharging its sulphurous lava. It is a sorry world which is surfeited to suffocation by its industrial progeny. A way must be found out, a way, though paradoxical as it might seem, which lessens output and at the same time secures increasing employment for the destitute millions. That way is to cut down existing plant and machinery and offer the fullest scope for the adequate employment of human labour.

I will now raise a more fundamental problem though it will not admit of easy solution: does machinery spell progress? Is the price we pay for machinery outbalanced by its benefits? This is to discuss the social aspect of machinery. I will not repeat in its entirety the droll tale of the liabilities of our machine age: the strain, the hurry, the noise, the dirt, the disease which machinery brings in its train. My objection is fundamental and concerns human civilization itself. The advent of the machine with the lightning rapidity of its

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production has simply multiplied human wants and has created them where they did not exist. This surplus of extraordinary human desires to meet which the machines are set in motion indicate a terrible wastage of human capital. It is labour lost. If the countries of the world were engaged today in producing tremendous trifles and geegaws which are destroyed in the minute of their purchase we would not call it progress. The argument that there is a forthcoming demand for such production is merely flimsy. The demand exists because the supply is forthcoming. We would rather have an ordered world in which the employment of labour and capital is directed to the satisfaction of basic human needs, towards making the poorest inhabitant contented and happy. We certainly do not estimate our welfare by the *per capita* production (it is a wrong reckoning): we gauge it, on the contrary, by the available capacity per head of logical and necessary consumption, in terms of purchasing power. It is clear that the mechanisation of industry is not conducive to this ideal state. It is unnecessary to labour the point.

I must not be taken to mean that I decry the utilisation of machinery altogether and for all time. I am not unaware that in a

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rapidly progressive age the hand of man must not be the doer but the directing agent of all industrial activity. It were too cruel to harness the human unit to a spiritless lot of manual labour when the monotonous repetition of basic operations can be transferred with more facility to man-made machine. But would it not be more cruel if in our anxiety to liberate the physical man by the substitution of mechanical devices we turned him out to starvation and unemployment? There is such a thing as the dignity of labour, of labour, when especially it fetches sustenance to hungry mouths. It is true we should pay dearly for this larger absorption of all human labour but nothing is too dear if it brings happiness to the poorest inhabitant of our country. It is economic justice in the highest sense, a more equitable distribution of economic welfare. The machine steps in when the maximum absorption of manual labour has taken place, when the economic advantages derived by the employment of machinery far outweigh the loss it entails; when, that is to say, it is no more economic from the view-point of national welfare to enlist the services of man. This point is reached only when the industrial activity of man being properly recompensed is not able to produce the adequate goods

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necessary for our consumption; or the adequate goods having been produced there is a surplus of production beyond national needs for which machinery can more advantageously be employed.

The question remains: what shall be the direction of our industrial development therefore? The outstanding moral of our industrial decadence seems to my mind to be the gross misdirection of our urban industries which bulk largely on the written page of our industrial past. These industries were, as I have said, luxury crafts dependent for the most part upon an unceasing aristocratic demand. The evil thereof was two-fold: firstly, the manufactures did not minister to the primary needs of man and to that extent entailed economic waste, and secondly, the cessation of the demand of the nobility necessitated the outright abandonment of the artistic professions by the craftsmen leading to industrial maladjustment. The dispossessed urban craftsmen, I said, flocked to the villages and pressed upon the land. This meant that seasonal agricultural unemployment was augmented heavily and the *per capita* return from agricultural land underwent considerable depreciation.

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The grand mistake of Western Civilization is that it was built upon urban foundations. Politically, it generated the City state of Greece. Its economic order was naturally moulded in the political frame. The City state was not merely the repository of political authority: it was the very fount of economic direction. The 'polis' set the social standards for all and economic life was arranged according to city prescription. The products of industry fashioned to meet human requirements necessarily followed urban dictation. The cities became, therefore, the centres not only of economic prescription but also of industrial production. When production became thus centralised in a few cities or towns the inevitable corollary was centralised capitalistic production which was out to reap profits and reduce labour to the margin of subsistence. The labourer became a mere drudge, having little voice in the direction of industry. He lost the creative instinct. When gradually production became still more centralised due to monopolistic combinations, leading to price-fixing and cornering, labour fell back beaten and organised itself in counter attack. The erstwhile helpless labourer thus built for himself a fence against the onslaughts of capitalism, in defence of unemployment

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and starvation. The succeeding conflict between organised Capital and organised Labour leading to the disorganisation of productive industry is common stock. Moreover, when industry became so urbanised the villages ceased to count as formative factors in industrial production, being reduced to mere growers of raw produce for the towns and cities.

India offered a different solution to her economic problem. The village in India and not the town was the base of the economic structure. The spheres of industry likewise radiated from the villages. The rural areas not only grew the raw-produce but fashioned that raw-produce into finished products, each rural artisan working by himself. Production was, therefore, decentralised and eliminated the middleman and the agent. The villager was thus capitalist and labourer in one person. He was the *entrepreneur* and expert also. And in those days when money economy had not displaced barter economy, payments were made in kind and not expressed through a wasteful medium of exchange. For, payments in kind ensured the minimum of subsistence to the villager and an equitable distribution of rural wealth. The towns and cities acted merely as agents for the distribution of the

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industrial products, which remained in excess of local requirements. In that beneficial era of decentralised production there could be no self-seeking captains of industry clotting the even flow of economic wealth.

But those things are changed now. The village artisan has become a mere drudge. The *entrepreneur* and the expert have departed to the towns and cities. Rural industry has become stereotyped and atrophied being divested of the creative factors of production. The rot has set in.¹

It is, therefore, I think that the stimulus given to the regeneration of our decadent rural crafts in the inauguration of the Village Industries Association a step in the right direction. It is yet another abiding monument to the fertile genius of the Mahatma. It may not exactly be a marvellous short-cut to political *Swaraj* but this project for the amelioration of the villager by the provision of primary and subsidiary occupations is a more tangible reality than the concept of constitutional freedom. And the bulk of India lives in villages. By its very nature the Association is a giant scheme, a colossal enterprise. Any discussion of its many-faceted possibilities,

1 J. C. Kumarappa.

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however, falls without the scope of this work. It is yet too early to speak of the issue of the project. But of this there can scarcely be any doubt that it is certain to enlist the foremost of India's disinterested workers and if anything shall promote Indian rural reconstruction the All India Village Industries Association must go a long way.

ALL INDIA VILLAGE INDUSTRIES ASSOCIATION
(APPENDIX)

THE forty-eighth session of the Indian National Congress at Bombay will go down as the most epoch-making in Congress history. At that session held on the 27th October, 1934 the All India Village Industries Association was formed. From its inception the course of the Congress has been one progressive identification with the masses and its purposed objective the securing of the maximum rural welfare. For, is not rural India, India itself and the India of the towns a costly excrescence? Hitherto, the Congress had set itself primarily to the promotion of the Cotton Industry, the sun, as it has been called, of the rural industrial firmament. But cotton is merely the central point in the system of our rural industrial activity and it becomes imperative, if we are to secure the fulness of village life, to foster every industry even the smallest. For, the wide variety of village produce besides cotton must be made into finished products and the traditional skill latent in our rural artisans must be given the fullest play.

The ideal of our rural industrial development must be the village conceived as a self-sufficient unit in which corporate effort secures the maximum welfare. It must be possible

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to estimate the needs of every rural unit at least approximately and village labour should be so ordered as to meet these needs adequately. The industrial occupations of the village should, therefore, aim in the first instance at the satisfaction of local requirements before we can think of a marketable surplus. (Among the persons who must find employment in rural industries we must reckon necessarily two classes, whole-timers and part-timers, who for the rest of the year are mostly engaged in agrarian pursuits). This secures the ideal functioning of the mechanism of rural industry: the raw products raised by agriculture furnish the material of local industry; and generally, with no expensive implements, no elaborate capital, the hand of man fashions the products by that ideal arrangement wherein the capitalist and the workman are one and the same person.

If we might safely suppose that the great part of rural manufactures is consumed in the village itself there is, I think, a very good case, as has been suggested in some quarter, for a reversion to the barter system of economy. The idea, indeed, may appear grotesque at first sight. But it is obvious that the expression of the value of village products in terms of money involves a two-fold loss: firstly

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the translation of money into articles again is double reckoning, and there is the likelihood of the money flowing out of the village for wasteful purchases instead of being returned to the village itself. The direct exchange of commodities in the village, on the other hand, is conducive to the conservation and proper distribution, as far as possible, of rural wealth.

The marketable surplus emerges in two cases: firstly, when the turnover of the village is in excess of its requirements, and in the second instance, when the products command an extra-local market being specialised.

Now I will deal directly with the Village Industries Association. Its object is 'village reorganisation and reconstruction, including the revival, encouragement and improvement of village industries and the moral and physical advancement of the villagers of India.' The Association will function through an Administration Board. The business of the Board is best expressed in the words of Gandhiji. He says: 'The function of the Board will be to define the programme of village reconstruction work from time to time, to co-ordinate the policy followed in different centres, to collect, collate and circulate information gathered from workers or agents as

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to the actual condition of the existing village industries, both those that may be flourishing and those that may be perishing, also as to the economic, moral and physical condition of villagers, to carry on research work with the help of specialists and experts and to discover and create a market for surplus village manufactures.' The key-note of the policy of the Board will be decentralisation, the whole country being divided into a number of areas superintended by agents or workers. Workers and Agents will be selected having regard to their organising ability and influence in the area of their activity. Back of the Association and co-ordinating its work with the Administration Board will be an Advisory Board or 'Brain Trust' of eminent experts. Co-operation of expert scientists will be requisitioned in the utilisation of by-products etc.

It is necessary to clear a few misconceptions which have been entertained in regard to the Association's functioning.

Firstly, the Association does not produce on its own. It is not the Association's object to start production-centres but merely to co-ordinate industrial experience and knowledge of all parts of the country. Nor is a central Industrial Institute of any kind going

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to be started at Wardha (though a Museum of rural industrial products is in contemplation). For, the dictation of a uniform plan or policy from the centre will run counter to the avowed objects of the Association. The Association aims at liberating the individual craftsman, in developing his creative impulses in the invention and elaboration of improved industrial patterns. Nor is the Association going to invest in machinery. Says Mr. Kumarappa: 'Wherever there is a blacksmith's anvil, or a potter's wheel, or a carpenter's bench, these will form our equipment.'

It has been asked if the Association has declared itself against the use of machinery of any kind. That is not so. The main criterion is that the masses shall not be exploited, as at present under the machine-system, in whatever way. If efficiency must be increased mechanical aids will certainly be utilised provided they do not result in the exploitation of the villager. For that matter the 'charka' is a machine, being an improvement over the 'takli'. It is absolutely possible that man-power when it has been afforded the fullest scope for employment may be replaced in a remote future by electric power.

Some have suggested socialisation of production as a panacea for our industrial

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maladies. That is to take the Soviet experiment too much for granted. In point of fact, the transition from socialistic production to capitalistic production is too easy. Socialistic production implies its control and administration at the helm by a few individuals. And what is there to prevent the anti-social, self-seeking impulse from gaining the upper hand and those individuals grabbing at power? There is another objection. We decry capitalistic production because it makes an automaton of the human unit. Man becomes but another spoke in the wheel of industry. The initiative of production is not left with the individual. Nor does socialistic production guarantee this initiative to the individual. Where production is directed from the top the human unit ceases to count.

I have sketched a bare outline of the Village Industries Association. I have touched on a few broad principles. I have no room for detail or criticism. In fact, the only way of approach towards the project is one of helpful understanding. One gesture of faithful co-operation is worth more than pages of impracticable academic ebullition. |

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